



National Competency Standards for  
**Automobile  
Mechanic**



National Vocational and Technical Training Commission (NAVTTTC)  
Government of Pakistan

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**National Competency Standards**

*for*

**Automobile Mechanic**

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## **INTRODUCTION**

An Automobile Mechanic/Auto-Mechanic is a tradesman who specializes in the mechanical systems contained within automotive vehicles. This person is an expert on engine overhauling and the entire vehicle systems i.e. repair of Ignition System, Fuel System, Carburetor, EFI system, Engine Cooling & Lubrication Systems, repair of manual & automatic transmissions, braking, suspension, steering, wheel balancing and alignment - all fall under the Auto Mechanic's domain of expertise. The job of an Automobile Mechanic is perfect for those who love to work with their hands. This is a job that involves constant activity, so it is perfect for someone who dreads the idea of sitting at a desk all day. Automobile Mechanic is hired by car manufacturers, car dealers and auto repair shops.

Automobile industry is dynamic and every changing as complex technological advancements are taking place in this sector. Therefore, industry expectations for skilled workforce are also dynamic which can only be managed through setting relevant competency standards in collaboration with the leading industries. Being cognizant of this fact, National Vocational & Technical Training Commission (NAVTTTC) developed competency standards for Automobile Mechanic under National Vocational Qualifications Framework (NVQF). These competency standards have been developed by a Qualifications Development Committee (QDC) and validated by the Qualifications Validation Committee (QVC) having representation from the leading auto sector companies of the country.

## **PURPOSE OF THE QUALIFICATION**

The purpose of these qualifications is to set high professional standards for automobile industry. The specific objectives of developing these qualifications are as under:

- Improve the professional competence of the trainees
- Provide opportunities for recognition of skills attained through non-formal or informal pathways
- Improve the quality and effectiveness of training and assessment for automobile industry
- Enable the existing workforce to capacitate themselves in new technologies and methods

## **DATE OF VALIDATION**

These national qualifications have been validated by the Qualifications Validation Committee (QVC) on 13<sup>th</sup> & 14<sup>th</sup> February 2018 and they will remain in currency until 13<sup>th</sup> February 2021.

## CODE OF QUALIFICATION

| Qualification Title   | Code      |
|---|-----------|
| <b>National Vocational Certificate Level-2 in Automobile Technology<br/>(Automobile Mechanic)</b> | 0716MSA06 |
| <b>National Vocational Certificate Level-3 in Automobile Technology<br/>(Automobile Mechanic)</b> | 0716MSA07 |
| <b>National Vocational Certificate Level-4 in Automobile Technology<br/>(Automobile Mechanic)</b> | 0716MSA08 |

## ENTRY REQUIREMENTS

The entry requirement for National Vocational Certificate Level-2 in Automobile Technology

(Automobile Mechanic) is at least Matric or equivalent.

## QUALIFICATIONS DEVELOPMENT COMMITTEE

The Qualifications Development Committee consisted of following members:

| S. No. | Name                       | Designation & Organization   |
|--------|----------------------------|--|
| 1.     | Ijaz Hamid                 | Chief Instructor (Auto & Diesel)<br>GCT, Railway Road, Lahore - PTEVTA |
| 2.     | Syed Salman Nasir Ali Shah | Deputy Manager<br>PTEVTA   |
| 3.     | Mehwish Aisha Ahsan        | CBT Expert/Assessor  |
| 4.     | Adeel Ahmad                | Assistant Manager (Tech)<br>Lahore Transport Company, Lahore           |
| 5.     | Rehman Ali                 | Assistant Manager<br>Al-Haj Faw Motors (Pvt.) Ltd.                     |
| 6.     | Abdul Basit                | Technical Advisor<br>Toyota Garden Motors, Lahore                      |
| 7.     | Aamir Javed                | Service Manager<br>Suzuki Khalid Motors, Lahore                        |
| 8.     | Syed Kazim Hussain         | Technical Advisor<br>Toyota Township Motors, Lahore                    |
| 9.     | Atif Mahmood               | Service Manager<br>Suzuki Mini Motors, Lahore                          |
| 10.    | Muhammad Abdul Wasay       | Assistant Manager<br>Al-Haj Faw Motors (Pvt.) Ltd.                     |

## QUALIFICATIONS VALIDATION COMMITTEE

The Qualifications Validation Committee consisted of following members:

| S. No. | Name                   | Designation & Organization   |
|--------|------------------------|--|
| 1.     | Ijaz Hamid             | Chief Instructor (Auto & Diesel)<br>GCT, Railway Road, Lahore - PTEVTA |
| 2.     | Mian Atique            | CEO<br>Rehman Motors Workshop, Model Town, Lahore                      |
| 3.     | Syed Aamir Ali Wasti   | Director<br>Honda Kizan, Lahore  |
| 4.     | Muhammad Naveed Malik  | CEO<br>Vision Plus, Automotive Equipment Solutions, Lahore             |
| 5.     | Haji Muhammad Arshad   | CEO<br>Honda, Raheem Yar Khan Motors                                   |
| 6.     | Abdul Waheed           | CEO<br>Honda Pitspot, Johar Town Motors                                |
| 7.     | Muhammad Husain Mumtaz | AM (After Sale Service)<br>Honda Atlas Cars, Lahore                    |
| 8.     | Jawad Haider           | Technical Advisor<br>Suzuki, Lahore                                    |

## REGULATIONS FOR THE QUALIFICATION AND SCHEDULE OF UNITS

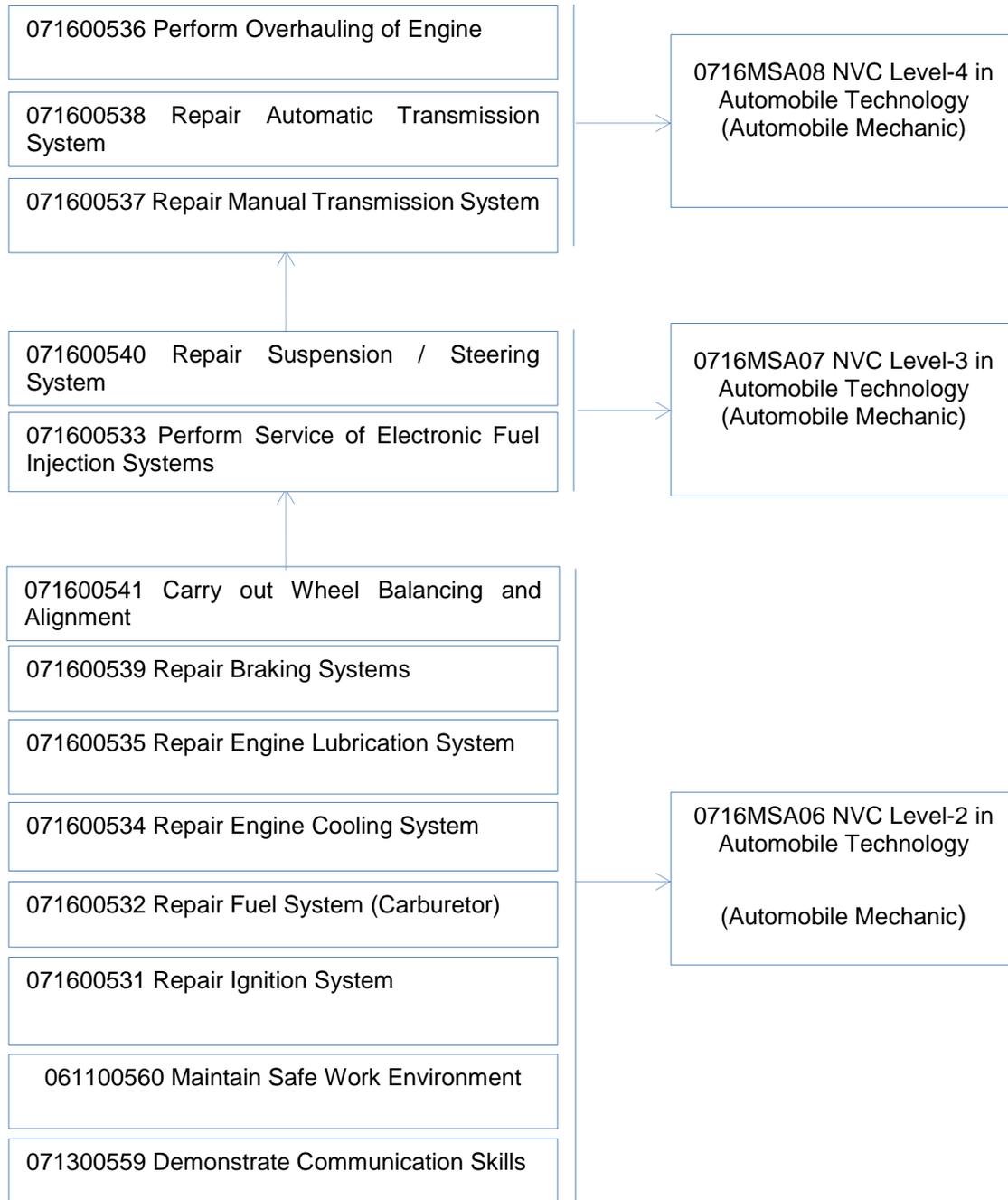
Not Applicable

## SUMMARY OF COMPETENCY STANDARDS

| Code             | Competency Standards                                       | Level | Credits | Category  |
|------------------|--|-------|---------|-----------|
| <b>071300559</b> | Demonstrate Communication Skills                           | 2     | 03      | Generic   |
| <b>061100560</b> | Maintain Safe Work Environment                             | 2     | 03      | Generic   |
| <b>071600531</b> | Repair Ignition System                                     | 2     | 10      | Technical |
| <b>071600532</b> | Repair Fuel System (Carburetor)                            | 2     | 10      | Technical |
| <b>071600533</b> | Perform Service of Electronic Fuel Injection Systems       | 3     | 18      | Technical |
| <b>071600534</b> | Repair Engine Cooling System                               | 2     | 10      | Technical |
| <b>071600535</b> | Repair Engine Lubrication System                           | 2     | 12      | Technical |
| <b>071600536</b> | Perform Overhauling of Engine                              | 4     | 24      | Technical |
| <b>071600537</b> | Repair Manual Transmission System                          | 4     | 18      | Technical |
| <b>071600538</b> | Repair Automatic Transmission System                       | 4     | 24      | Technical |
| <b>071600539</b> | Repair Braking Systems                                     | 2     | 10      | Technical |
| <b>071600540</b> | Repair Suspension / Steering System                        | 3     | 24      | Technical |
| <b>071600541</b> | Carry out Wheel Balancing and Alignment                    | 2     | 12      | Technical |
| <b>041600453</b> | Occupational health and safety                             | 2     | 3       | Technical |
| <b>041600455</b> | Communicate in the workplace to support customers and team | 3     | 6       | Technical |
| <b>041600459</b> | Work effectively in a customer service - sales environment | 3     | 7       | Technical |
| <b>041600460</b> | Develop professionalism                                    | 3     | 3       | Technical |
| <b>041600461</b> | Comply with health and safety regulations                  | 3     | 2       | Technical |

## PACKAGING OF QUALIFICATIONS

The national vocational qualifications are packaged as per following:



## 071300559 Demonstrate Communication Skills

### Overview

This Competency Standard identifies the competencies required to apply communication skills at workplace in accordance with the organization guidelines and procedures. You are expected to work in a team to achieve common organizational goals and avoid conflicts. This competency standard would also enable you to use basic computer skills to communicate effectively and prepare work related documents.

| Competency Units                      | Performance Criteria  |
|---------------------------------------|---|
| 1. <b>Work in Team</b>                | <ul style="list-style-type: none"><li>P1. Treat team members with respect and maintain positive relationship to achieve common organizational goals</li><li>P2. Listen to instructions carefully and fully comply with them</li><li>P3. Provide work related information to team members and identify interrelated work activities to avoid confusion</li><li>P4. Adopt communication skills appropriate to work activities and company procedures</li><li>P5. Identify problems and resolve them through discussion and mutual agreement</li></ul>                           |
| 2. <b>Deal with Clients</b>           | <ul style="list-style-type: none"><li>P1. Collect and confirm work requirements from clients using appropriate communication procedures</li><li>P2. Provide clear information to clients about work requirements including costs and time needed to accomplish the task</li><li>P3. Negotiate with clients regarding wages, time, labour requirements etc.</li></ul>  |
| 3. <b>Demonstrate Basic IT Skills</b> | <ul style="list-style-type: none"><li>P1. Create folders and files and learn major commands of operating system/windows</li><li>P2. Type text and use major commands such as printing, editing, creating tables, header, footer, footnotes, table of contents and page number etc.</li><li>P3. Make the document as per work specifications and client requirements</li><li>P4. Generate reports for clients as required using appropriate computer applications</li><li>P5. Use internet for sending/receiving emails and connecting through social or other media</li></ul> |

## **Knowledge and Understanding**

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out the tasks covered in this competency standard. This includes the knowledge of:

- Principles of effective and interactive communication
- 7 C's of communication and their importance
- Cultural and organizational practices for effective communication
- Effective negotiation skills
- Role of team members and functionality of work teams
- Team dynamics and stages of team development
- Conflict resolution strategies
- Negotiation techniques
- Basic architecture of computer system
- Input / output devices of computer and their functions
- Basic computer skills using MS Word, MS Excel, use of internet, sending and receiving emails etc.
- Preparing documents and work related reports

## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Communicate effectively with colleagues and clients
- Develop a job completion report for the work using computer technology

## 061100560 Maintain Safe Work Environment

### Overview

This Competency Standard identifies the competencies required to apply Occupational Safety and Health (OSH) at workplace in accordance with the organization's approved guidelines and procedures. You will be expected to identify and use Personal Protective Equipment (PPE) according to the job requirement and potential hazards at workplace. The underpinning knowledge regarding OSH will be sufficient to provide the basis for your work.

| Competency Units  | Performance Criteria  |
|---|---|
| <p>1. <b>Identify Hazards at Workplace</b></p>                | <p>P1. Read and interpret work processes and procedures correctly to identify risk of hazards at workplace</p> <p>P2. Recognize engineering processes, tools, equipment and consumable materials that have the potential to cause harm</p> <p>P3. Identify any potential hazards and take appropriate action to minimize the risk</p>   |
| <p>2. <b>Observe Occupational Safety and Health (OSH)</b></p> | <p>P1. Work safely at all times, complying with health and safety precautions, regulations and other relevant guidelines</p> <p>P2. Identify health and safety hazards at the workplace, so that the potential for personal injury, damage to equipment or the workplace is prevented, and corrective action is taken</p> <p>P3. Deal with problems which are within your control, and report those that cannot be resolved to the safety officer</p> <p>P4. Wear, adjust, and maintain Personal Protective Equipment to ensure correct fit and optimum protection in compliance with company procedures</p> <p>P5. Keep work area clean and clear of obstructions, and storing tools or equipment, so that the potential for accident or injury is prevented</p> |

## **Knowledge and Understanding**

The candidate must be able to demonstrate underpinning knowledge and understanding required to carry out tasks covered in this competency standard. This includes the knowledge of:

- Types of hazards that are most likely to cause harm to health and safety
- Health and safety precautions
- Health and safety signs and symbols
- Techniques and methods to identify the risks of hazards at workplace
- Dealing with hazards to avoid any accident or injury
- Following 5S and Kaizen Activities
- Safety reporting procedures and documentation
- Use of Personal Protective Equipment
- First aid treatment methods including methods of resuscitation
- Fire-fighting methods
- Safe methods of handling heavy loads

## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify possible hazards at workplace
- Use correct Personal Protective Equipment (PPE) for the assigned job

## List of Tools and Equipment

| S. No. | Items  |
|--------|--|
| 1.     | Health and Safety Manual   |
| 2.     | Fire Extinguisher  |
| 3.     | Safety Equipment, Safety Shoes, Safety Gloves, Safety Goggles, Safety Helmet and Ear Plugs |
| 4.     | Smoke Detecting Alarm  |
| 5.     | First Aid Box  |

## 071600531 Repair Ignition System

### Overview

This competency standard is designed to provide skills and knowledge to Repair ignition system of vehicle by Auto Mechanic, in the light of manufacturer manual. You will be able to diagnose faults related to ignition system of vehicle and repair faulty part/s according to set standards.

| Competency Units                             | Performance Criteria   |
|--|--|
| 1. <b>Diagnose Faults of Ignition System</b> | <p>P1. Check electric power source and charging system of the vehicle for specified functionality and diagnose faults, if any</p> <p>P2. Check ignition switch and ensure specified function and diagnose faults, if any</p> <p>P3. Check ignition circuit continuity, connectivity &amp; installation, and ensure specified functioning and diagnose faults, if any</p> <p>P4. Check Ignition coil and resistor to ensure specified function and diagnose faults, if any</p> <p>P5. Check C.B. point and condenser to diagnose faults</p> <p>P6. Check distributor unit and diagnose faults</p> <p>P7. Check High tension cables for insulation breakdown, continuity, resistance and diagnose faults, if any</p> <p>P8. Check cables for insulation breakdown, continuity &amp; resistance and diagnose faults, if any</p> <p>P9. Check spark plugs for insulation, leakage, plug gap and type and diagnose faults, if any</p> |

- 2. Remove Faults of Ignition System**
- P1. Replace battery and related auxiliary components, clean and adjust terminals and wire clamps to ensure proper connectivity, if needed
  - P2. Replace/adjust alternator belt or replace alternator
  - P3. Check faulty fuse and replace with new fuse while ensuring correct rating
  - P4. Insulate wires or cables to provide specified current flow
  - P5. Replace ignition coil or resistor to ensure specified function
  - P6. Replace ignition switch according to standard specifications
  - P7. Replace faulty parts of distributor (C.B. point and condenser)
  - P8. Change High tension cables to ensure smooth functioning of ignition system, if needed
  - P9. Replace/clean and adjust spark plugs to required measurements and function
- 

## **Knowledge and Understanding**

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS) precautions
- Use of Manufacturer Repair Manual
- Understanding of Electric Wiring Diagram (EWD)
- Use of general hand tools of mechanic
- Uses of Multi-meters
- Uses of Vehicle Diagnostic Scanner
- Uses of Hydro-meter
- Different types of Batteries and their functionality
- Basic Auto Electricity and Electronics
- Principle of Ignition System
- Identification of components of ignition system

- Cleaning methods and materials
- C.B. Point Gap and adjustment
- Function of spark plug wire and spark plug
- Types of spark plugs
- Function of ignition coil
- Functions of distributor and its adjustment

## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Diagnose fault and repair/replace faulty parts of Ignition system according to the SOPs
- Diagnose faults and repair/replace faulty parts of Pneumatic/Mechanical Governor Units
- During engine running, perform Ignition timing adjustments

## 071600532 Repair Fuel System (Carburetor)

### Overview

This competency standard is designed to provide skills and knowledge to repair fuel system (Carburetor) by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to diagnose faults of fuel system and repair the fuel system, carefully applying the tools and equipment according to SOPs.

| Competency Units                                      | Performance Criteria  |
|---|---|
| 1. <b>Diagnose Faults in Fuel System (Carburetor)</b> | <p>P1. Check fuel, fuel tank, filter and lines and identify fault/s according to set standards</p> <p>P2. Check Fuel pump and identify fault/s in fuel supply to Carburetor according to set standards</p> <p>P3. Check Fuel pump operating function by camshaft</p> <p>P4. Check and identify fault/s to ensure the proper functioning of Carburetor</p> |
| 2. <b>Remove Faults in Fuel System (Carburetor)</b>   | <p>P1. Replace faulty fuel tank/ filter/ lines to ensure accurate functioning of vehicle</p> <p>P2. Replace faulty Fuel Pump to ensure the proper functioning of fuel supply to Carburetor</p> <p>P3. Repair and adjust fault/s in Carburetor to ensure the proper air fuel mixture supply to engine for smooth functioning of engine</p>                 |

### Knowledge and Understanding

- This competency standard will provide knowledge related to:
- Occupational Health & Safety (OHS) precautions
- Understanding of Manufacturer Repair Manual
- Carburetor circuits and Ancillary System
- Octane Numbering of fuel
- Use of measuring tools and equipment
- Use of tachometer

- Use of engine exhaust CO Analyzer
- Use of cleaning material
- Functionality of fuel tank, fuel filter, fuel gauge, fuel pump etc.

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify and repair fault/s in Carburetor fuel system ensuring the proper functioning of engine
- Performing adjustments in a carburetor system using proper tools and equipment

## 071600533 Perform Service of Electronic Fuel Injection Systems

### Overview

This competency standard is developed to provide skills and knowledge to service the Electronic Fuel Injection (EFI) System by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to diagnose fuel system problems of vehicle and service fuel metering.

| Competency Units  | Performance Criteria   |
|---|--|
| 1. <b>Diagnose Faults in EFI System</b>                                   | <p>P1. Diagnose component fault/s through specified vehicle diagnostic tool/scanner</p> <p>P2. Check fuel pressure with the help of fuel pressure gauge to verify the functioning as per given standards</p> <p>P3. Check wiring circuit and fuel injector with the help of multi-meter to ensure standard operation</p> |
| 2. <b>Perform Service of the EFI System</b>                               | <p>P1. Replace clogged/contaminated Fuel Filter, Fuel Tank or Fuel Pump Strainer</p> <p>P2. Ensure fuel pump pressure according to Standard specifications</p> <p>P3. Clean clogged/ contaminated Fuel Injector, if needed</p>   |
| 3. <b>Perform Service of the Common Rail Diesel Fuel Injection System</b> | <p>P1. Replace clogged/ contaminated diesel fuel filter and diesel fuel pump strainer, if needed</p> <p>P2. Ensure diesel fuel pump pressure according to Standard specifications; replace, if needed</p> <p>P3. Replace clogged/ contaminated diesel fuel injector</p>  |

### Knowledge & Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS) precautions
- Understanding of Manufacturer Repair Manual
- Use of vehicle scanner
- Types fuels
- Use of multi-meter
- Use of measurement gauges (Pressure Gauge)

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify and fix Fuel Injection System faults as per set standards

## 071600534 Repair Engine Cooling System

### Overview

This competency standard is developed to provide skills and knowledge to service and repair air and water cooled engine cooling systems, in accordance with the Manufacturer Manual. You will be able to diagnose fault/s and other maintenance issues of automobile engines while ensuring safe use of tools, equipment and materials.

| Competency Units  | Performance Criteria  |
|---|---|
| <b>1. Diagnose Fault in Engine Cooling System</b>             | <p>P1. Carry out inspection of radiator, cooling fan/ motor to diagnose fault/s, if any</p> <p>P2. Check Coolant for contamination and diagnose fault/s, if any</p> <p>P3. Carry out inspection to check Water temperature gauge, and sensor and diagnose fault/s, if any</p> <p>P4. Carry out inspection to check V belt/ condition and its tension to verify smooth functionality of water pump belt and diagnose fault/s, if any</p> <p>P5. Carry out inspection to check Vacuum/ pressure valve in radiator cap with appropriate tool, to verify recommended pressure</p> <p>P6. Carry out inspection to check heat units and accessories of Passenger compartment, to verify leakage</p> |
| <b>2. Repair or Replace radiator and Auxiliary Components</b> | <p>P1. Adjust water pump belt tension to verify proper functioning of coolant system according to requirement</p> <p>P2. Replace faulty radiator pressure cap according to set standards</p> <p>P3. Replace faulty radiator reservoir to maintain recommended coolant level in the cooling</p>  |

- P4. Replace faulty thermostat valve to maintain the temperature of coolant at 90° C to 97° C
- P5. Perform Flushing of contamination from clogged radiator without damaging the radiator core
- P6. Remove faulty water circulating pump to verify proper circulation of coolant in cooling system
- 

## **Knowledge and Understanding**

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS)
- Repair Manual
- Mechanism of engine cooling system
- Types of radiators
- Heat transfer methods
- Types of engine cooling systems
- Radiator cap valves
- Coolant Flow Circuit
- Temperature and system pressures
- Sensors in engine cooling system

## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify faults in engine cooling system of vehicle engine and repair or replace faulty parts/components according to SOPs
- State advantages and disadvantages of water and air cooling systems in engine

## 071600535 Repair Engine Lubrication System

### Overview

This competency standard is developed to provide skills and knowledge to service and repair different types of engine lubricating systems, in accordance with the Manufacturer Manual. You will be able to diagnose fault/s and other maintenance issues of automobile engines while ensuring safe use of tools, equipment and materials.

| Competency Units                                      | Performance Criteria   |
|---|--|
| 1. <b>Diagnose Faults in Lubrication System</b>       | <p>P1. Check engine oil level and condition</p> <p>P2. Inspect oil pressure warning lamp/gauge according to manufacturer specifications</p> <p>P3. Inspect oil/sump/combustion chambers/ cooling system for oil leakage and find dents or damages, if any</p>  |
| 2. <b>Repair or Service Engine Lubrication System</b> | <p>P1. Replace Engine Oil and Oil Filter to verify smooth functioning of engine</p> <p>P2. Replace engine oil pressure switch to maintain standard engine oil pressure in the system</p> <p>P3. Dismantle oil sump, repair or replace oil pump to remove any damage according to manufacturer specifications</p> |

### Knowledge & Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS)
- Repair Manual
- Positive Crankcase Ventilation System (PCV)
- Types of lubricants (characteristics, viscosity and grades)
- Oil Flow circuit in engine

- Oil pressure
- Oil pumps, coolers, filters, relief valve, pressure and level indicator etc.
- Electrical controls and switches

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify faults in Oil Lubricating System of engine and repair or replace faulty parts/components according to SOPs
- Identify Points and places for oil leakage

## 071600536 Perform Overhauling of Engine

### Overview

This competency standard is developed to provide skills and knowledge to Overhaul Engine (Petrol and Diesel), in accordance with the Manufacturer Manual. You will be able to diagnose fault/s and other maintenance issues of automobile engines while ensuring safe use of tools equipment and materials.

| Competency Units  | Performance Criteria  |
|---|---|
| <p>1. <b>Inspect Engine of the Vehicle</b></p>          | <p>P1. Carryout compression test to check the engine performance according to standards</p> <p>P2. Identify leakages in engine for oil/ coolant by following standard procedure</p> <p>P3. Drain engine oil and coolant as per standard procedure</p>   |
| <p>2. <b>Remove Engine from the Vehicle</b></p>         | <p>P1. Disconnect relevant electrical connections of engine as per standard procedure</p> <p>P2. Remove ancillary components of engine as per standard procedure</p> <p>P3. Remove engine from the vehicle for overhauling according to standard procedure</p>  |
| <p>3. <b>Dismantle the Components of the Engine</b></p> | <p>P1. Mount engine on engine overhauling trolley as per standards</p> <p>P2. Dismantle engine components to identify faults as per Manufacturer Repair Manual</p> <p>P3. Mark engine components and identify their fixing order or the place</p> <p>P4. Clean all parts of engine for repair as per standard procedure</p> |

#### 4. Repair the Engine

P1. Check engine cylinder head (Cam Shaft, Valve Set and Valve Seat) to repair/replace, if required

P2. Take measurements for machining of engine components (Crank Shaft, Cam Shaft and Engine Block) as per standards

P3. Reassemble engine with specified torque as per standard procedures

#### 5. Re-fit Engine in the Vehicle

P1. Refit engine on vehicle, fill engine oil and radiator coolant to required level

P2. Check supply lines from fuel, air, and coolant etc.

P3. Reconnect relevant engine electrical connections of battery and wire harness

P4. Vehicle test run as per SOPs and final adjustments if necessary; ensure proper working condition

### Knowledge and Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS)
- Repair Manual
- Mechanism of Engine
- Use of hand tools, torque wrench, special service tools for removal/adjustment
- Measuring tools and equipment (Pressure Gauges, Micrometer, Vernier Caliper, Multi-meters and scanners)
- Lifting equipment
- Engine components
- Measurement of wear in Crank Shaft, and in Cam Shaft, Engine Bore, Piston, Bearings, Bushes and Shims

### Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify faults of automatic transmission system and repair or replace faulty parts/components according to SOPs

## 071600537 Repair Manual Transmission System

### Overview

This competency standard is designed to provide skills and knowledge to repair manual transmission of vehicle by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to diagnose faults related to transmission system of vehicle and repair faulty part/s according to set standards.

| Competency Units   | Performance Criteria  |
|--|---|
| <p>1. <b>Diagnose Faults in Manual Transmission System</b></p> | <p>P1. Check clutch mechanism (paddle, linkage etc.), hydraulic clutch fluid conditions and leakage, according to specified standards, and diagnose faults, if any</p> <p>P2. Check gear mechanism (linkage bushes and bearings, shafts of gears, differential etc.), oil level and leakage according to the specified standards, and diagnose faults, if any</p> <p>P3. Check Gear box mounts and diagnose faults, if any</p> <p>P4. Disassemble transmission to diagnose faults, if any</p>   |
| <p>2. <b>Repair Manual Transmission System</b></p>             | <p>P1. Maintain or change hydraulic clutch paddle fluid of clutch according to specified level</p> <p>P2. Repair or replace any defected part/s according to specified standards, after performing vehicle test on road for checking slipping, abnormal noise, vibrations etc.</p> <p>P3. Replace clutch set (clutch and pressure plate, clutch release bearing) and repair related components according to specified standards, if required</p> <p>P4. Repair or replace faulty part/s of transmission gear box according to specified standards</p> |

|  |   |
|--|---|
| <b>3. Repair auxiliary transmission components</b> | <p>P1. Repair or replace faulty part/s of propeller shafts according to specified standards</p> <p>P2. Repair or replace faulty components of differential according to specified standards</p> <p>P3. Repair or replace faulty axle according to specified standards</p> <p>P4. Repair or replace faulty seals and washers according to specified standards</p> <p>P5. Reassemble and install a transmission gearbox in a vehicle according to Manufacturer Manual</p> |
|--|---|

## Knowledge and Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS)
- Manufacturer Repair Manual
- Uses of measuring tools (Vernier Caliper, Micro-meter, Feeler Gauge etc.)
- Gear Ratio
- Torque Wrench
- Lubricants
- Sealing Materials

## Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify faults of manual transmission system and repair or replace faulty parts/ components according to SOPs

## 071600538 Repair Automatic Transmission System

### Overview

This competency standard is developed to provide skills and knowledge to repair Automatic Transmission System and ancillary components by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to diagnose faults in Automatic Transmission System of the vehicle and repair the same while using standard procedures.

| Competency Units  | Performance Criteria  |
|---|---|
| <p>1. <b>Diagnose Automatic System Faults in Transmission System</b></p>            | <p>P1. Carry out road test at different speeds for smooth operations of torque converter and gear shifting according to Manufacturer standard</p> <p>P2. Check automatic transmission mounts for faults if any</p> <p>P3. Check automatic transmission fluid (ATF) level, according to standard specification and identify leaks if any</p> <p>P4. Check automatic transmission solenoid by using automotive scanner and identify faults if any</p> <p>P5. Check electrical controls and Hydraulic pressure of automatic transmission for faults if any</p> |
| <p>2. <b>Disassemble Automatic Transmission System and Ancillary Components</b></p> | <p>P1. Remove automatic transmission and disassemble it to check for worn-out/ faulty part/s and replace them as per Manufacturer Repair Manual</p> <p>P2. Check automatic transmission performance by ensuring proper linkages and controls as per standards</p> <p>P3. Reassemble automatic transmission and refit to the vehicle according to standards</p>  |

## **Knowledge and Understanding**

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS) precautions
- Manufacturer Repair Manual
- Fluid types of automatic transmission
- Use of hand tools, torque wrench, special service tools for removal/adjustment
- Use of measuring tools and equipment (Pressure Gauges, Multi-meters, Scanners)
- Use of lifting equipment

## **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify faults of Automatic Transmission System and repair or replace faulty parts/ components according to SOPs

## 071600539 Repair Braking Systems

### Overview

This competency standard is designed to provide skills and knowledge to repair brake system of vehicle by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to perform inspection and diagnosis of faults of the brake system of vehicle, and perform road test to verify the performance of the vehicle.

| Competency Units                                      | Performance Criteria   |
|---|--|
| <p><b>1. Diagnose Faults of Braking System</b></p>    | <p>P1. Check brake indicator switches to identify fault</p> <p>P2. Perform road test to verify the faults of Brake System, unusual wear, noise and operation according to SOPs</p> <p>P3. Check standard brake fluid level and quality/aging</p> <p>P4. Check brake lines and hoses to check brake fluid leaks</p> <p>P5. Check and identify Parking Brake and Master Cylinder, Wheel Cylinder, Vacuum Booster Units, Air Booster Parking Brake System, Brake Indicator Switches, Cable Faults etc. as per set standards</p> <p>P6. Identify faulty components of Anti-Lock Braking System (ABS) (sensors, pump, controller, valves etc.) to identify faults</p> |
| <p><b>2. Perform Repair of the Braking System</b></p> | <p>P1. Dismantle brake system components of building layout as per Manufacturer Specifications</p> <p>P2. Repair faults of Brake Lines and Hoses according to set standards</p> <p>P3. Inspect and repair/replace/adjust Brake Shoe / Drum, Calliper Washers, Dust Boots, Wheel Cylinder Washers, and Master Cylinder Washers according to the requirement of respective parts to ensure proper functioning of Brake System</p> <p>P4. Replace or repair Brake Disc Rotor and Brake Drum according to set standards</p>  |

- P5. Refill Brake Fluid level according to set standards
- P6. Replace brake stop light switch according to set standards
- P7. Perform road test to ensure the proper working of brake system

|  |   |
|--|---|
| <p><b>3. Diagnose faults of Anti-Lock Braking System (ABS)</b></p> | <ul style="list-style-type: none"> <li>P1. Perform road test to ensure proper working of ABS</li> <li>P2. Identify faults of ABS Brake using vehicle scanner</li> <li>P3. Visually check brake lines and hoses, blockage or crimping</li> <li>P4. Inspect wheel speed sensor (proper mounting, connection or broken teeth)</li> <li>P5. Visually inspect ABS controller for any damages</li> </ul>  |
| <p><b>4. Perform Repair of Anti-Lock Braking System (ABS)</b></p>  | <ul style="list-style-type: none"> <li>P1. Raise vehicle via car jack / lift and place safety support if required</li> <li>P2. Clear malfunctioning unit with the help of vehicle scanner</li> <li>P3. Disconnect impulse sensor, electrical connector and check sensor for continuity</li> <li>P4. Clean hoses connections thoroughly for blockage or crimping</li> <li>P5. Replace faulty components of Anti-Lock Braking System (ABS) as per Manufacturer specifications</li> <li>P6. After repair, ensure that warning lights on the instrument panel operate properly</li> </ul> |

## Knowledge and Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS) precautions

- Understanding of Manufacturer Repair Manual
- Fluid pressure
- Use of Measuring Tools
- Types and specifications of pneumatic tyres
- Types of rims
- Tyre rotation
- Basic electrical/ Electronics
- Functions of Electronic Brake Force Distribution (EBD) System
- Functions and working of ABS System
- ABS air bleeding

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Diagnose faults in Brake System and replace/ repair faulty part/s confirming the smooth functioning of the vehicle

## 071600540 Repair Suspension / Steering System

### Overview

This competency standard is developed to provide skills and knowledge to repair suspension system and ancillary components of vehicle by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to perform inspection and diagnosis of faults in Suspension System of vehicle and perform road test to verify performance of the vehicle.

| Competency Units                                      | Performance Criteria   |
|---|--|
| <p>1. <b>Diagnose Faults in Suspension System</b></p> | <p>P1. Perform road tests on different types of roads to verify abnormal noise/stability and vibrations</p> <p>P2. Lift-up and perform physical inspection (Shock Absorber Leakage, Bushes, Coil Springs, Leaf Springs, Tension and Torsion Bars, Stabilizer Bars, Spring Seat etc.) to identify abnormal wear/tear and movements</p> <p>P3. Perform ground clearance according to manufacturer specifications</p> |
| <p>2. <b>Repair or Service Suspension System</b></p>  | <p>P1. Replace Ball Joints, Lower Control Arms, Z-links and Stabiliser Bar to avoid wear and tear of suspension, if required</p> <p>P2. Replace front and rear Shock Absorbers to verify smooth operation of Shock Absorber as per set standards</p> <p>P3. Fix or replace front and rear spring, height and tension of springs as per set standards</p>   |
| <p>3. <b>Diagnose Steering System</b></p>             | <p>P1. Perform road tests on different types of roads to verify abnormal noise/stability and vibrations</p> <p>P2. Check steering rack assembly to identify fault, if any</p>  |

|                                     |  |
|-------------------------------------|--|
|                                     | <p>P3. Check power steering pump, pipe, connection, belt, steering rack and fluid level of hydraulic power steering gear box including leakage, if any.</p> <p>P4. Check wiring, steering assembly, EPS module and electrical connection of Electronic Power Steering (EPS).</p> <p>P5. Check EPS sensor light in instrument panel</p> <p>P6. Check all mounting nuts and bolts to ensure safety</p> |
| <b>4. Repair of Steering System</b> | <p>P1. Repair/ replace faulty components of steering system according to set standards</p> <p>P2. Replace/ repair electrical components of EPS, if required</p> <p>P3. Perform steering calibration, if required</p>   |

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## Knowledge and Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS) precautions
- Understanding of Repair Manual
- Functionality of Shock Absorber
- Types of lubricants (characteristics, viscosity and grades)
- Maintaining the oil pressure
- Oil pumps, coolers, filters, relief valve, pressure and level indicator etc.
- Electrical controls and switches

## Critical Evidence(s) Required

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify faults in Suspension System of vehicle and repair or replace faulty parts/ components according to SOPs

## 071600541 Carry out Wheel Balancing and Alignment

### Overview

This competency standard is designed to provide skills and knowledge related to wheel balancing and steering alignment of vehicle by Auto Mechanic, in accordance with the Manufacturer Manual. You will be able to perform wheel and steering alignment and balance and repair faulty part/s according to set standards.

| Competency Units                  | Performance Criteria   |
|-----------------------------------|--|
| 1. <b>Perform Wheel Balancing</b> | <p>P1. Perform road test to verify the balance of wheels according to set standards</p> <p>P2. Check Wheel rim and tyre condition according to set standards</p> <p>P3. Carry out wheel balancing using appropriate wheel balancing equipment and fix weight/s as per requirement</p> <p>P4. Re-test vehicle on road to verify correction of wheels balancing according to set standards</p> |
| 2. <b>Perform Wheel Alignment</b> | <p>P1. Perform road test to verify alignment of wheels according to set standards</p> <p>P2. Check functionality of suspension, steering and adjust camber, caster, toe-in-and toe-out according to set standards</p> <p>P3. Re-test vehicle on road to verify alignment of wheels according to set standards</p>  |

### Knowledge and Understanding

This competency standard will provide knowledge related to:

- Occupational Health & Safety (OHS) precautions
- Manufacturer Repair Manual
- Different types of Tyres
- Vehicle lifting and support procedures
- Wheel balancing Weight
- Run out
- Torque measurement process
- Basic Geometrical Angles
- Camber, caster, toe-in-and toe out
- Method of Wheel Balancing
- Static and dynamic

### **Critical Evidence(s) Required**

The candidate needs to produce following critical evidence(s) in order to be competent in this competency standard:

- Identify and fix wheel alignment and balancing faults as per set standards

## Occupational health and safety

### Purpose

It is for the safety of persons working in that environment.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

| Unit of Competency                                       | Performance Criteria   | Knowledge   |
|--|--|---|
| <b>I1. Identify and implement safe working practices</b> | You must be able to:<br>P1. Study of facility layout design and operations<br>P2. Implement the health and safety measures | You must know and understand:<br>K1. Knowledge of health and safety precautions |

## Communicate in the workplace to support customers and team

### Purpose

This Competency standard identifies the competencies required to communicate in the workplace to support customers and team as per organization's approved guidelines and procedures. You will be expected to communicate face-to-face with customers, use technology to communicate with customers, communicate with customers and colleagues from diverse backgrounds, work in a team, ask appropriate probing / questioning from customers and provide continuous feedback to customers / colleagues. Your underpinning knowledge about basic communication tools and correspondence tactics will be sufficient for you to provide the basics of the work.

### Classification ISCED

### Available grade

Competent / Not yet competent

### Modification history

N/A

| Unit of Competency                                  | Performance Criteria  | Knowledge   |
|---|---|---|
| <b>B1. Communicate face-to-face with customers.</b> | <b>You must be able to:</b><br>P1. Maintain welcoming customer environment that reflects company branding and market position and is in line with the company policy and procedures.<br>P2. Greet customer warmly according to company policy | <b>You must be able to:</b><br>K1. Explain different techniques that can be applied when communicate with customer face to face<br>K2. Describe types of customer behavior and dealings<br>K3. Explain different communication skills and |

|  |   |  |
|--|---|--|
|  | <p>and procedures.</p> <p>P3. Create effective service environment through verbal and non-verbal interaction according to company policy and procedures.</p> <p>P4. Use questioning and active listening to determine customer needs.</p> <p>P5. Use positive and inclusive language.</p> <p>P6. Recognize personal factors impact on customer service delivery</p> | <p>techniques</p> <p>K4. Explain the basic key elements of the communication process.</p> <p>K5. Describe a range of communication methods that can be used to effectively communicate with customers and identify the most appropriate to use in different situations.</p> <p>K6. Explain how 'body language' impacts on the communication process.</p> |
|--|---|--|

**B2. Use technology to communicate with customers.**

**You must be able to:**

- P1. Answer telephone according to the company procedures.
- P2. Questioning and active listening to identify caller and establish and confirm requirements.
- P3. Use telephone system functions according to instructions.
- P4. Use email, social networking sites and other technologies to receive and process information and customer requests in line with company policy and procedures.
- P5. Record and promptly pass on messages or information.
- P6. Inform customer of any problems and relevant action being taken.
- P7. Perform follow-up action as necessary.

**You must be able to:**

- K1. Identify the recognized principles of communicating electronically, by telephone and in writing.
- K2. Describe the different methods of collecting customer feedback on telephone.
- K3. Explain the importance of collecting customer feedback and how this can be used to improve customer service.
- K4. Describe how technology can affect and enhance the service delivery process.

**B3. Communicate with customers and colleagues**

**You must be able to:**

- P1. Treat customers

**You must be able to:**

- K1. Identify the barriers to

**from diverse backgrounds.**

and colleagues from diverse backgrounds with respect and sensitivity.

- P2. Consider cultural differences in verbal and non-verbal communication.
- P3. Use gestures or simple words to communicate where language barriers exist.
- P4. Obtain assistance from colleagues or supervisors when required to facilitate communications.

effective communication that can arise and how best to deal with these.

- K2. Identify and explain when it is necessary to seek advice or assistance from colleagues and when to take own initiative.
- K3. Describe different types of dealings techniques with different types of behaviors

**B4. Work in a team.**

**You must be able to:**

- P1. Display a courteous and helpful manner at all times.
- P2. Complete allocated tasks willingly, according to set timeframes.
- P3. Actively seek or provide assistance by approaching other team members when difficulties arise.
- P4. Identify and use lines of communication with supervisors and peers according to company policy.
- P5. Encourage, acknowledge and act upon constructive feedback provided by other team members.
- P6. Use questioning to minimise misunderstandings.
- P7. Identify signs of potential workplace conflict wherever possible and take action to resolve the situation using open and respectful communication.
- P8. Participate in team problem solving.
- P9. Interpret organization's goals and objectives and translate

**You must be able to:**

- K1. Define team work.
- K2. Explain the importance of team work.
- K3. Define company goals and objectives as well as SOPs of the company
- K4. Explain different concepts and techniques of problem solving
- K5. Describe systematic decision making process
- K6. Describe characteristics of a successful teamwork experience.

them into individual targets  
 P10. Prepare plan of action to achieve individual as well as team goals

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| <p><b>B5. Ask appropriate probing / questioning from customers</b></p> | <p><b>You must be able to:</b></p> <p>P1. Use different types of questions when appropriate.</p> <p>P2. Allow the other person to answer freely.</p> <p>P3. Collect facts, information and data about the other person's situation.</p> <p>P4. Focus on the necessary information (information that links directly to product or service)</p>   | <p><b>You must be able to:</b></p> <p>K1. Explain:</p> <ul style="list-style-type: none"> <li>• Open-ended questions</li> <li>• Close-ended questions</li> <li>• High gain questions</li> <li>• Mirror questions</li> <li>• Probing questions</li> <li>• Situation questions</li> </ul> |
| <p><b>B6. Provide continuous feed-back</b></p>                         | <p><b>You must be able to:</b></p> <p>P1. Give and receive feed-back with customers.</p> <p>P2. Apply appropriate body language and read customers body language.</p> <p>P3. Give and receive feed-back with internal departments.</p> <p>P4. Design a communication system / process and share information.</p> <p>P5. Gain commitment from others to work together in the interest of the customers.</p> <p>P6. Conduct meetings.</p> <p>P7. Utilize the feed-back to identify opportunities for product / service improvement.</p> | <p><b>You must be able to:</b></p> <p>K1. Explain how to use customer feed-back to improve your business</p> <p>K2. Define importance of body language.</p> <p>K3. Explain communication ethics.</p> <p>K4. Define organizational Jargon.</p>   |



## Work effectively in a customer service/ sales environment

### Purpose

This Competency standard identifies the competencies required Work Effectively in a Customer Service/Sales Environment as per Organization's approved guidelines and procedures. You will be expected to work within organizational requirements, support the work team, maintain personal presentation, develop effective work habits, portray ethical behaviour and acquire up to date product / service knowledge. Your underpinning knowledge about Work Effectively in a Customer Service/Sales Environment will be sufficient for you to provide the basics of the work.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

| Unit of Competency                                  | Performance Criteria  | Knowledge  |
|---|---|--|
| <b>F1. Work within organizational requirements.</b> | <b>You must be able to:</b><br><br>P1. Identify and read organisation's requirements and responsibilities and seek advice from appropriate people where | <b>You must be able to:</b><br><br>K1. Define industry awards and agreements that relate to personal job role and terms and conditions of employment.<br>K2. Differentiate between employer and employee |

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|--|---|--|
|  | <p>necessary.</p> <p>P2. Interpret staff rosters and provide sufficient notice of unavailability for rostered hours according to workplace policy and procedures.</p> <p>P3. Develop and use a current working knowledge and understanding of employee and employer rights and responsibilities.</p> <p>P4. Comply with relevant duty of care and legal responsibilities, and support organisational culture.</p> <p>P5. Identify roles and responsibilities of colleagues and immediate supervisors.</p> <p>P6. Identify standards and values considered to be detrimental to the organisation and communicate this through appropriate channels.</p> <p>P7. Identify, recognise and follow behaviour that contributes to a safe and sustainable work environment.</p> | <p>responsibilities.</p> <p>K3. Explain different relevant legislation and statutory requirements.</p> |
|--|---|--|

**F2.Support the work team.**

**You must be able to:**

- P1. Display courteous and helpful behaviour at all times.
- P2. Take opportunities to enhance the level of

**You must be able to:**

- K1. Explain the importance of team work
- K2. Define workplace relations
- K3. Explain workplace policies, plans and procedures, including:

assistance offered to colleagues and meet all reasonable requests for assistance within acceptable workplace timeframes.

- P3. Complete allocated tasks as required.
- P4. Seek assistance when difficulties arise.
- P5. Use questioning techniques to clarify instructions or responsibilities.
- P6. Identify and display a non-discriminatory attitude in all contacts with customers and other staff members.

- Dealing with grievances
- Discriminatory behavior
- Equal opportunity issues.
- Staff rosters and notification of shift
- Availability or non-attendance
- Providing customer service to colleagues and customers.

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|---|---|---|
| <p><b>F3. Maintain personal presentation.</b></p> | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>P1. Observe appropriate dress code and presentation as required by the workplace, job role and level of customer contact.</li> <li>P2. Follow personal hygiene procedures according to organisational policy and relevant legislation.</li> </ul> | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>K1. Explain hygiene and personal presentation</li> <li>K2. Explain the importance of workplace ethics</li> </ul>              |
| <p><b>F4. Develop effective work habits.</b></p>  | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>P1. Interpret, confirm and act on workplace information, instructions and procedures relevant to the particular task.</li> <li>P2. Ask questions to seek and clarify workplace information.</li> <li>P3. Plan and organise daily</li> </ul>       | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>K1. Explain staff counseling and disciplinary procedures</li> <li>K2. Describe workplace organizational structure.</li> </ul> |

work routine within the scope of the job role.

- P4. Prioritise and complete tasks according to required timeframes.
- P5. Identify work and personal priorities and achieve a balance between competing priorities

|  |  |  |
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| <p><b>F5. Portray ethical behavior</b></p>                       | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>P1. Follow ethical code of conduct.</li> <li>P2. Understand your customer's code of ethics.</li> <li>P3. Declare conflict of interest.</li> <li>P4. Maintain confidentiality.</li> <li>P5. Honour your commitments (timeframe, deliverables etc.)</li> <li>P6. Use internet for business only on company time.</li> </ul>  | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>K1. Explain the importance of ethical behavior.</li> <li>K2. Explain the importance of commitment in sales and customer services.</li> </ul>   |
| <p><b>F6. Acquire up to date product / service knowledge</b></p> | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>P1. Gather information about your product / services.</li> <li>P2. Identify the components of your product and services.</li> <li>P3. Recognize the essential selling features of your products and services.</li> <li>P4. Translate all essential features of your product and services.</li> <li>P5. Analyze product success.</li> <li>P6. Identify your market</li> </ul> | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>K1. Explain: <ul style="list-style-type: none"> <li>• Price per product.</li> <li>• Profit per product / service.</li> <li>• Price flexion</li> <li>• Product strengths</li> <li>• Product weaknesses.</li> <li>• Warranty / guarantee policies.</li> <li>• Packaging facilities and potential.</li> </ul> </li> <li>K2. Explain how your</li> </ul> |

- position.
- P7. Familiar with all product promotions, sales manuals and product literature.
- P8. Keep information of latest technology advances and seek ways to use these technologies in your work.
- 

product/service fits into your customers overall operations, business plan, sales success, operation cost etc.

## Develop professionalism

### Purpose

This Competency standard identifies the competencies required to Develop Professionalism as per Organization's approved guidelines and procedures. You will be expected to create a personal vision / mission, manage your attitude, practice self-discipline, manage time, manage your professional development, and participate in trainings and performance review. Your underpinning knowledge about Develop Professionalism will be sufficient for you to provide the basics of the work.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

| Unit of Competency                            | Performance Criteria   | Knowledge   |
|---|--|---|
| <b>G1. Create a personal vision / mission</b> | <b>You must be able to:</b><br>P1. Clarify / prioritize self-values and consider the value of others.<br>P2. Clarify expectations of yourself and expectations others have of you.<br>P3. Identify what you need to do to be successful (personal standards, | <b>You must be able to:</b><br>K1. Explain long and short term goals.<br>K2. Explain why personal vision and mission is important for success.<br>K3. Describe the advantages of personal vision and mission. |

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|  | <p>targets, goals, principals)</p> <p>P4. Set specific short and long term goals.</p> <p>P5. Translate the vision into actionable steps.</p> <p>P6. Integrate the vision into daily practice.</p> <p>P7. Recount frequently with your vision and change accordingly.</p>   |   |
| <p><b>G2. Manage your attitude.</b></p>    | <p><b>You must be able to:</b></p> <p>P1. Challenge yourself, break old habits, and move out of your comfort zone.</p> <p>P2. Practice innovative techniques for out of the box creative thinking.</p> <p>P3. Seek out support and feedback from others on the team, in the organization / community etc.</p> <p>P4. Identify daily, weekly accomplishments.</p> <p>P5. Read inspirational material, audiotapes etc.</p> | <p><b>You must be able to:</b></p> <p>K1. Explain the importance of personal and professional motivation</p> <p>K2. Identify your positive attitude.</p> <p>K3. Explain the advantages of innovative ideas and techniques during job.</p> |
| <p><b>G3. Practice self-discipline</b></p> | <p><b>You must be able to:</b></p> <p>P1. Accountable for your performance.</p> <p>P2. Identify what you need to do to be successful.</p> <p>P3. Communicate your priorities to others.</p> <p>P4. Make and honour appointments with yourself and others.</p> <p>P5. Practice relaxation and energizing techniques.</p>  | <p><b>You must be able to:</b></p> <p>K1. Explain the importance of communication.</p> <p>K2. Explain the advantages of self-discipline.</p>  |
| <p><b>G4. Manage time</b></p>              | <p><b>You must be able to:</b></p> <p>P1. Isolate key success activities and prioritize them.</p>  | <p><b>You must be able to:</b></p> <p>K1. Explain the importance of time management to achieve different tasks.</p>   |

- P2. Breakdown large tasks down into manageable action steps (set time frame).
- P3. Create or adopt action plans and follow it.
- P4. Set aside appropriate blocks of time for goal-related activities.
- P5. Make the best possible use of support people / recourses to accomplish tasks.

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| <p><b>G5.Manage your professional development</b></p>            | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>P1. Take inventory of your personal interests, abilities, skills, knowledge etc.</li> <li>P2. Identify and prioritize the strengths and gaps.</li> <li>P3. Use available assessment tools.</li> <li>P4. Create a personal growth strategy / career path.</li> <li>P5. Set personal goals and timeframe for achieving them.</li> <li>P6. Learn from your mistakes.</li> </ul> | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>K1. Explain the importance and need of professional development.</li> </ul>   |
| <p><b>G6.Participate in trainings and performance review</b></p> | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>P1. Analyse, evaluate and improve performance, and report significant issues/problems to senior management</li> <li>P2. Demonstrate to-do attitude in profession</li> <li>P3. Demonstrate understanding of skills requirements</li> <li>P4. Use the competences acquired in trainings</li> </ul>   | <p><b>You must be able to:</b></p> <ul style="list-style-type: none"> <li>K1. Define concept about performance standards.</li> <li>K2. Explain policies, procedures and regulations regarding human resources of the organization.</li> <li>K3. Explain self-planning and management techniques</li> <li>K4. Define goals and strategies of self- development.</li> <li>K5. Explain relevant knowledge about training / job requirements</li> </ul> |



## Comply with health and safety regulations

### Purpose

This Competency standard identifies the competencies required to comply with health and Safety Regulations as per Organization's approved guidelines and procedures. You will be expected to interpret health and safety regulations, apply basic safety procedures and apply basic emergency procedures. Your underpinning knowledge about comply with health and safety regulations will be sufficient for you to provide the basics of the work.

### Classification ISCED

0416 Wholesale and retail sales

### Available grade

Competent / Not yet competent

### Modification history

N/A

| Unit of Competency   | Performance Criteria   | Knowledge  |
|--|--|--|
| <b>H1. Interpret health and safety regulations, standards and guidelines of an organization.</b> | <b>You must be able to:</b><br><br>P1. Identify, understand and apply health and safety regulations at workplace<br><br>P2. Assess risk of injury and equipment damages in common work situations and report to department concerned for timely response | <b>You must be able to:</b><br><br>K1. Explain concepts and principles of health, safety, quality and environment regulations.<br><br>K2. Define types of risk of injuring and equipment damages.<br><br>K3. Describe types of risk and injury at workplace. |

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|  | <p>P3. Participate in quality enhancement of products or services of the organization</p> <p>P4. Comply with quality and safety standards effectively</p> <p>P5. Handle toxic and hazardous material and product with caution</p> <p>P6. Assess risk of injuries and accidents and report it to senior management for avoiding serious injuries</p> | <p>K4. Explain the procedure of dealing with risk and injury situation.</p> <p>K5. Explain health and safety policies and guidelines of the organization.</p> <p>K6. define characteristics and types of toxic and hazardous material or products offered by company and their impact on environment.</p> |
|--|---|---|

**H2. Apply basic safety procedures.**

**You must be able to:**

- P1. Follow safety procedures to achieve a safe work environment, according to all relevant WHS legislation, including codes of practice relating to particular hazards in the industry or workplace.
- P2. Identify and report unsafe work practices , including faulty plant and equipment according to company policy and procedures
- P3. Manage dangerous goods and substances according to company policy and relevant legislation.
- P4. Identify potential manual handling risks and manage manual handling tasks according to company policy.
- P5. Report work-related incidents and accidents

**You must be able to:**

- K1. Explain appropriate use of personal protective clothing.
- K2. Explain the procedure to eliminating hazards.
- K3. Explain first aid procedures.

to designated personnel.  
 P6. Participate in consultative processes and procedures for WHS.

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| <p><b>H3. Apply basic emergency procedures.</b></p> | <p><b>You must be able to:</b></p> <p>P1. Follow fire and emergency procedures, including evacuation, according to company policy and legislation.</p> <p>P2. Identify designated personnel responsible for first aid and evacuation procedures.</p> <p>P3. .Accurately identifies safety alarms.</p> | <p><b>You must be able to:</b></p> <p>K1. Define fire, chemical and electrical hazards</p> <p>K2. Explain slip, trips and falls</p> <p>K3. Explain the procedure of storage of dangerous goods and hazardous substances and waste.</p> <p>K4. Define communication and consultation processes.</p> <p>K5. Explain manual handling procedures.</p> |
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## LIST OF TOOLS AND EQUIPMENT

| Sr. No. | Description   |
|---------|---|
| 1.      | Allen Key Set (Hexagonal, Torks)  |
| 2.      | Ampere Meter  |
| 3.      | Battery Tester  |
| 4.      | Bench Vice  |
| 5.      | Brake Bleeding Equipment  |
| 6.      | Brake Efficiency Tester   |
| 7.      | Brushes Different Types   |
| 8.      | Carburetor Service Kit (Special Service Tools)                              |
| 9.      | Cleaning Equipment with Detergent   |
| 10.     | Coil Spring Compressor  |
| 11.     | Compressed Air with Leaks Testing Gauges/ Equipment for Engine and Radiator |
| 12.     | Computer Lead Box/ Diagnosis System/ Interface Box                          |
| 13.     | Condenser Tester  |
| 14.     | Db Meter  |
| 15.     | Dial Gauge with Magnetic Stand  |
| 16.     | Drill Bits Set (Mason, Metal)   |
| 17.     | Dual Tacho Tester   |

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| 18. | Dust Blower   |
| 19. | Electric Connector Remover                            |
| 20. | Engine Exhaust CO Analyzer                            |
| 21. | Feeler Gauge  |
| 22. | Files Set for Contact Points Facing                   |
| 23. | Fuel Pressure Gauge                                   |
| 24. | General Mechanic's Hand Tools                         |
| 25. | Hammer-Different Size and Types                       |
| 26. | Hand Drilling Machine                                 |
| 27. | Hand Operated Vacuum Pump                             |
| 28. | Heat Gun  |
| 29. | Hydraulic Pressure Measuring Gauge/ Instrument        |
| 30. | Hydrometer (Gravity Meter)                            |
| 31. | Injector Tester                                       |
| 32. | Insulation Tester                                     |
| 33. | Jack Hoist/ Stands                                    |
| 34. | Jack Telescopic with Weight Lifting Capacity 1.5 Tons |
| 35. | Jack Trolley Type with Weight Lifting Capacity 5 Tons |
| 36. | Lifting Equipment (Service Pit)                       |
| 37. | Lock Pliers   |

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| 38. | Magnifying Glass                                       |
| 39. | Marking Tools  |
| 40. | Measuring Precision Tools/ Instruments                 |
| 41. | Measuring Tape   |
| 42. | Multi Scanner Tools for Vehicle                        |
| 43. | Multi-Meter (AVO Meter)                                |
| 44. | Oil Draining Machine                                   |
| 45. | Oil Filter Wrench                                      |
| 46. | Oil Funnel   |
| 47. | Oil Pressure Gauge with Different Types of Attachments |
| 48. | Oscilloscope   |
| 49. | Pedestal Drilling Machine                              |
| 50. | Pliers Set   |
| 51. | Power Tools  |
| 52. | Pullers Different Types                                |
| 53. | Radiator Cap Tester (Pressure and Vacuum Tester)       |
| 54. | Radiator Pressure Leakage Testers                      |
| 55. | Safety Clothing, Equipment and Kit                     |
| 56. | Scraper  |
| 57. | Screw Driver Kit                                       |

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| 58. | Soldering Iron   |
| 59. | Spark Plug Deep Sockets                                      |
| 60. | Spark Plug Tester  |
| 61. | Special Service Tools Recommended by the Manufacturer        |
| 62. | Special Tools for Removal/ Adjustment of Brake System        |
| 63. | Special Tools for Removal/ Adjustment of Manual Transmission |
| 64. | Spirit Level   |
| 65. | Spring Compressor  |
| 66. | Star Key Set   |
| 67. | Stroboscope  |
| 68. | Table Drilling Machine                                       |
| 69. | Tachometer   |
| 70. | Temperature Gauge  |
| 71. | Test Lamp  |
| 72. | Testing Board  |
| 73. | Toque Wrench   |
| 74. | Tweezers Kit   |
| 75. | V Blocks   |
| 76. | Wheel Alignment Equipment                                    |
| 77. | Wheel Balancer Machine                                       |

## 78. Work Bench

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