

# Certificate Supplement(\*)



1. Title of the certificate (TR)

# Otomotiv Mekanikçisi Mesleki Yeterlilik Belgesi

(Seviye 4)

(1) In the original language

## 2. Translated title of the certificate (EN)

# **Automotive Mechanic VQA Vocational Qualification Certificate**

(Level 4)

 $^{\left( 1\right) }$  If applicable. This translation has no legal status.

## 3. Profile of skills and competences

| UNIT TYPE |           | UNITS   |  |
|-----------|-----------|---|--|
|           |           | Occupational Health and Safety, Environmental Management  |  |
|           |           | Systems   |  |
|           |           |   |  |
|           |           | Knows the steps to be followed in case of emergency.  |  |
|           |           | <ul> <li>Knows the operations related to seperating hazardous wastes from materials at<br/>the level to explain.</li> </ul>       |  |
|           |           | <ul> <li>Has knowledge about flammable and imflammable materials at working<br/>environment at the level to recognize.</li> </ul> |  |
|           |           | Is knowledgable about keeping working environment and equipment in order.   |  |
|           |           | Knows specific environmental protection standards.  |  |
|           |           | Knows materials which can be transformed.   |  |
| 11UY0021- |           | <ul> <li>Knows the legislation on the occupational health and safety and workplace<br/>rules.</li> </ul>                          |  |
|           |           | <ul> <li>Knows the occupational health and safety protection and intervention tools.</li> </ul>                                   |  |
|           |           | Knows the risks influencing occupational health and safety.   |  |
|           |           | Knows the operation procedures related to autonomous maintenance.   |  |
|           |           | <ul> <li>Has knowledge about materials which are inconvenient to use at the level to<br/>recognize.</li> </ul>                    |  |
|           |           | <ul> <li>Is knowledgable about hitches as abrasion, deterioration and attrition at part an<br/>hardwares.</li> </ul>              |  |
| 4/A1      | MANDATORY | Knows the operating lives of the parts.   |  |
| .,,       |           | Is knowledgable about risk analysis.  |  |
|           |           | Has knowledge of basic first aid.   |  |
|           |           | Knows the meanings of warning and signs.  |  |
|           |           | Knows the environmental impacts of realised operations.   |  |
|           |           | Knows the environmental impacts of performed operations.  |  |
|           |           | Applies required procedures in case of emergency.   |  |
|           |           | Keeps working area in order and clean.  |  |
|           |           | <ul> <li>Applies maintenance stages for operating hardwares properly and continuously</li> </ul>                                  |  |
|           |           | Seperates the materials which can be transformed.   |  |
|           |           | Applies occupational safety rules.  |  |
|           |           | Applies required first aid steps in case of working accident.   |  |
|           |           | Takes precautions related to the occupational health and safety.  |  |
|           |           | Observes environmental impacts during application of business processes.  |  |
|           |           | <ul> <li>Takes precautions for reducing environmental impacts during operations.</li> </ul>                                       |  |
|           |           | Uses personal protective equipments.  |  |
|           |           | Applies the operation procedures related to autonomous maintenance.   |  |
|           |           | Reduces risk factors.   |  |
|           |           | Distinguishes hazardous wastes safely.  |  |
|           |           | Determines the depreciated, end-of-life parts.  |  |
|           |           | <ul> <li>Determines the situations which can affect occupational health and safety at</li> </ul>                                  |  |

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|---------------------------|-----------|--|
|                           |           | <ul> <li>working environment.</li> <li>Controls the operability of safety mechanisms related to the working hardwares.</li> <li>Ensures the keeping of flammable and inflammable materials at the working environment safely.</li> <li>Ensures the operativeness of occupational health and safety protection and intervention tools.</li> <li>Tracks the operating lives of the parts.</li> <li>Determines the risk factors.</li> <li>Works in compliance with the warning and signs.</li> <li>Works in accordance with the protection method to be applied.</li> <li>Determines the environmantal impacts of realised operations.</li> </ul>   |
| Quality Management System |           | Quality Management System  |
| 11UY0021-<br>4/A2         | MANDATORY | <ul> <li>Knows the quality requirements related to maintenance operations.</li> <li>Knows the operayions related to the information and evaluation forms.</li> <li>Is knowledable about keeping working environment and equipments in order.</li> <li>Knows his own jurisdiction at overcoming the problems.</li> <li>Knows the quality assurance techniques.</li> <li>Knows the operations related to the quality and waste/fault forms.</li> <li>Has general knowledge about quality control and management systems.</li> <li>Has knowledge about materials which are inconvenient to use at the level to recognize.</li> <li>Has knowledge about hitches as abrasion, deterioration and attrition at part and hardwares.</li> <li>Knows the national quality legislations and technical standards.</li> <li>Knows the meanings of warning and signs.</li> <li>Performs the operations related to defective hardware and parts.</li> <li>Conducts the quality requirements related to maintenance operations.</li> <li>Stores maintenance and cleaning supplies in appropriate way.</li> <li>Fills in the information and evaluation forms.</li> <li>Keeps working area in order and clean.</li> <li>Applies maintenance stages for operating hardwares properly and continuously.</li> <li>Conducts technical procedures related to the quality assurance.</li> <li>Fills in the quality and waste/fault forms.</li> <li>Performs cleaning operations in compliance with the occupational safety conditions.</li> <li>Places the warning and signs at appropriate positions.</li> <li>Determines the depreciated, end-of-life parts.</li> <li>Works in accordance with the quality requirements of machine, tool, hardware or systems.</li> <li>Works in compliance with the warning and signs.</li> <li>Works in compliance with the protection method to be applied.</li> </ul> |
| 11UY0021-<br>4/A3         | MANDATORY | <ul> <li>Arranging the Work and Tools</li> <li>Knows the steps to be followed in case of emergency.</li> <li>Has knowledge about the technical shemes related to the hardware structure of the vehicles and engine.</li> <li>Knows the operations related to defective hardware and parts.</li> <li>Knows the operations related to the defining specifications of the vehicle to be maintained and repaired.</li> <li>Has knowledge of keeping working environment and equipments in order.</li> <li>Knows materials which can be transformed.</li> <li>Has knowledge about materials which are inconvenient to use at the level to recognize.</li> <li>Has knowledge about procedures related to the evaluation of customer complaints.</li> <li>Knows the operation procedures related to autonomous maintenance.</li> <li>Is knowledgable about hitches as abrasion, deterioration and attrition at part and hardwares.</li> <li>Knows his own jurisdiction at overcoming the problems.</li> <li>Knows the cleaning supplies and their usage instructions.</li> <li>Knows the meanings of warning and signs.</li> <li>Has knowledge about average durations of operations to be performed.</li> <li>Applies required procedures in case of emergency.</li> </ul>   |

Records the detriments determined on the vehicle to the related form. Performs the operations related to defective hardware and parts. Stores maintenance and cleaning supplies in appropriate way. Keeps working area in order and clean. Prepares aparatus, hardwares and tool required for work. Applies maintenance stages for operating hardwares properly and continuously. Seperates the materials which can be transformed. Applies the occupational safety rules. Uses personal protective equipments. Performs required preparation and adjustment operations of tools to be used. Determines and keeps tracks of spare parts required for repair. Applies the operation procedures related to autonomous maintenance. Distinguishes hazardous wastes safely. Performs cleaning operations in compliance with the occupational safety conditions. Places the warning and signs at appropriate positions. Prepares appropriate tools for maintenance repair operations to be performed. Calculates the approximate cost according to the operations to be performed. Investigates and evaluates the technical schemes related to the hardware structure of the vehicles and engine. Controls whether there is physical damage on the vehicle manually. Controls the operability of safety mechanisms related to the working hardwares. Ensures the keeping of flammable and inflammable materials at the working environment safely. Puts the tool and hardwares whose related operations completed to appropriate places. Controls the operating conditions of the tools to be used. Investigates the forms related to customer complaints and controls the vehicle. Defines the vehicle delivery date according to the approximate operation duration. Performs cleaning operations in compliance with the occupational safety conditions. Works in compliance with the warning and signs. Works according to the protection method to be applied. **Final Control and Reporting** Knows the operations related to defective hardware and parts. Knows the operavions related to the information and evaluation forms. Knows the informing procedure about the general condition of the hardwares. Knows the quality assurance techniques. Knows the operation procedures related to autonomous maintenance. Has knowledge about materials which are inconvenient to use at the level to recognize. Has knowledge about hitches as abrasion, deterioration and attrition at part and hardwares. Knows the operating lives of the parts. Knows his own jurisdiction at overcoming the problems. Is knowledgable about risk analysis. Knows the cleaning supplies and their usage instructions. 11UY0021-**MANDATORY** Knows the meanings of warning and signs. 4/A4 Performs the operations related to defective hardware and parts. Stores maintenance and cleaning supplies in appropriate way. Fills in the information and evaluation forms. Performs informing about the general condition of the hardwares in compliance with the procedures. Applies occupational safety rules. Takes the precautions related to the occupational health and safety. Fills in the quality and waste/fault forms. Uses personal protective equipment. Applies the operation procedures related to autonomous maintenance. Reduces risk factors. Performs cleaning operations in compliance with the occupational safety conditions. Applies required procedures for fault and defects ultra vires. Determines the depreciated, end-of-life parts.

|                      | •       | Puts the tool and hardwares whose related operations completed to appropriate places.  |
|----------------------|---------|--|
|                      | •       | Works in accordance with the quality requirements of machine, tool, hardware or systems.   |
|                      | •       | Tracks the operating lives of the parts.   |
|                      | •       | Determines the risk factors.   |
|                      | •       | Determines the environmental impacts of realised operations.   |
|                      | Pe      | riodical Maintenance   |
| 11UY0021-<br>4/B1 OI | PTIONAL | Knows periodical maintenance operations to be performed on powertrains. Has knowledge about the projected standard values of tread depth and air pressures of tires.  Has knowledge about parts changed routinely at maintenance operations. Knows the periodical maintenance operations of the steering wheel system. Has knowledge about the projected standard values of the strain of the handbrake cable.  Knows periodical maintenance operations to be performed on brake system. Has knowledge about the estimated operating time of the air and cabin air filters.  Is knowledge about standard pressure values required to be produced by hydraulic steering wheel pump.  Has knowledge about the reference values of catalytic converter.  Knows periodical maintenance operations to be performed on engine cooling system.  Knows periodical maintenance operations to be performed on engine.  Knows periodical maintenance operations to be performed on engine.  Knows periodical maintenance operations of suspension system.  Has knowledge about the projected standard values of the valve free play.  Knows periodical maintenance operations of suspension system.  Has knowledge about the usage instructions of diagnostic testing devices.  Has knowledge about the projected standard values of the oil level and degree of consistency.  Knows periodical maintenance operations to be performed on fuel system.  Controls the axle shaft free plays, whether there are damages on axle shafts and shafts.  Repairs the troubleshot faults on powertrains.  Controls the conformity of tread depth and air pressures of tires to projected standard values.  Dismantles, cleans and controls the conformity of sparking plugs to projected standard values.  Dismantles, cleans and controls the conformity of sparking plugs to projected standards the collection of the steering wheel.  Controls the brake pads, discs and drums.  Controls the projected faults on brake system.  Drains and fills engine oilpan when necessary.  Dismantles, cleans and replaces the air and cabin air filter |
|                      |         | Controls the conformity of the valve free play to the projected standard values. Repairs the troubleshot faults on suspension system.  |
|                      |         | rropano ino noubicanoi iduna on adapenaion ayaidhi.  |

|                          | <ul> <li>Uses diagnostic testing devices.</li> <li>Repairs the faults determined by diagnostic testing devices during periodical operations.</li> <li>Controls and replaces the thermostat.</li> <li>Repairs the troubleshot faults on cornering (radius) arm.</li> <li>Controls the oil level and leakages of gearbox.</li> <li>Dismantles the oil filter from the vehicle and replaces.</li> <li>Controls the oil level and degree of consistency.</li> <li>Dismantles fuel filter connections.</li> <li>Repairs the troubleshot faults on fuel system.</li> <li>Controls the physical condition of dashpots.</li> <li>Defines the maintenance program appropriate for the kilometer, age of the vehicle and the season.</li> <li>Performs leakage control on the hydraulic pipe, hose and junctions.</li> <li>Defines the parts to be replaced or maintained repaired according to the customer complaints and demands.</li> <li>Controls physical condition of the mechanical components in the automatic transmission system.</li> <li>Controls the physical conditions, damage and abrasions of bow and springs at suspension systems.</li> <li>Controls the physical conditions of change speed gear, gear shafts and synchronizer setup.</li> <li>Performs the leakage and corrosion controls at fuel tank.</li> <li>Performs abrasion and leakage controls at fuel conduit pipes.</li> </ul>  |
|--------------------------|--|
|                          | • Ferioritis abrasion and leakage controls at ruel conduit pipes.  |
| 11UY0021-<br>4/B2 OPTION | Troubleshooting and Repair  Knows the troubleshooting and maintenance operations to be applied to powertrains.  Knows the troubleshooting and maintenance operations to be applied to brake system.  Is knowledgable the troubleshooting and maintenance operations to be performed while the engine is on the vehicle.  Knows the troubleshooting and repair operations to be applied to engine cooling systems.  Knows the troubleshooting and repair operations to be after dismantling the engine from the vehicle.  Knows the troubleshooting and maintenance operations to be applied to fuel system.  Dismantles the axle and shaft from the vehicle, controls and adjusts.  Adjusts the carburetor of the vehicles.  Controls the resistence values of ignition cable set.  Makes maximum and minimum level adjustments of torsion bars according to projected reference values.  Controls the conformity of clutch hydraulic level to the projected reference values.  Mounts the entire dismantled engine components at appropriate order.  Dismantles the diferential from the vehicle, controls and adjusts.  Controls the operation of steering wheel angle sensors in compliance with the projected reference values.  Controls the operation of steering wheel angle sensors in compliance with the projected reference values.  Controls the steering column, joint and rod connections.  Repairs the troubleshot faults on steering wheel system.  Controls the steering play and makes required adjustments.  Controls the pressure values of oil pressure pump at diesel-engined vehicles.  Controls the pressure values of oil pressure pump at diesel-engined vehicles.  Troubleshoots the faults on electrical steering wheel systems by diagnostic testing devices.  Maintains the injectors.  Controls the brake pads, discs and drums.  Controls the brake pads, discs and drums.  Controls the conformity of air cooling systems to the projected reference values.  Repairs the faults troubleshot as a result of controls.  Controls and adjusts the pressure regulator at LPG/CNG powered vehicle |

| • | Controls the conformity of engine cooling fluid and freezing point to projected |
|---|---|
|   | reference values  |

- Repairs the faults troubleshot at engine cooling system.
- Adjusts the straps on engine at appropriate strain.
- Dismantles the engine from the vehicle and mounts it to the vehicle by tieing chain hoist from appropriate positions.
- Dismantles the engine from chassis and connections with other entire components.
- Dismantles the automatic transmission from the vehicle and mounts it.
- Dismantles the radiator and water delivery pipes and repairs physical damages.
- Controls the radiator fan and rubber strap.
- Controls the rod and tie rods and makes required adjustments.
- Brings the cylinders to timing position and performs timing leakage test.
- Measures the pressure values of cylinders.
- Repairs the troubleshot faults on suspension system.
- Controls the conformity of suspension altitude sensor to projected reference values.
- Troubleshoots the faults at the engine and related units using diagnostic testing devices.
- Dismantles the spring, dashpot, virage (radius) arm and suspension arms of the tire and suspension system.
- Controls and replaces the thermostat.
- Controls and adjusts the torque convertor.
- Performs vacuum test on inlet manifold with vacuum indicator.

# 4. Range of occupations accessible to the holder of the certificate (1)

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(1) If applicable

## (\*) Explanatory note

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

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| 5. Official basis of the certificate   |   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| Name and status of the body awarding the certificate  Automotive Mechanic (Level 4) Vocational Qualification Certificate, is awarded by Authorised Certification Bodies authorised by Vocational Qualification Authority.  The list of Authorised Bodies available at: <a href="http://www.myk.gov.tr/ybk">http://www.myk.gov.tr/ybk</a> | Name and status of the national/regional authority providing accreditation/recognition of the certificate  Vocational Qualification Authority (Mesleki Yeterlilik Kurumu)  Ziyabey Caddesi 1420. Sokak No:12 Balgat Çankaya/ANKARA TURKIYE  www.myk.gov.tr  |  |  |  |  |  |
| Level of the certificate (national or international) ISCO 08: 7231 and Level 4- Turkish Qualifications Framework Detailed information on Turkish Qualifications Framework available at: <a href="http://www.tyc.gov.tr">http://www.tyc.gov.tr</a>  | Grading scale / Pass requirements It is required that the candidate must be successful at one of the alternatives of; A1, A2, A3, A4, B1, B2, B3, B4 II. Alternative: A1, A2, A3, A4, B1, B2, B3 III. Alternative: A1, A2, A3, A4, B1, B2 for obtaining Automotive Mechanic (Level 4) Vocational Qualification Certificate. |  |  |  |  |  |
| Access to next level of education/training - Legal basis   | International agreements -  |  |  |  |  |  |

Vocational Qualification Authority Law No. 5544

## 6. Officially recognised ways of acquiring the certificate

This document is prepared for candidates applying to authorised certification bodies, in the case of meeting the performance criteria after theoratical and applied assessments are made and each required unit for obtaining the qualification is successfully completed.

The performance criteria and assessment rates may be different for each qualification.

### **Entry requirements**

A) FORM: B class or upper driving licence is required for Alternative I and II.

### Information

11UY0021-4/ 17/02/2016 Rev. No:03

### Additional information

It is an equitable, transparent and confidental system including rules and activities regarding the development and application of technical and vocational education standards and qualifications, and accrediation, authorisation, audit, assessment, certification related to them, based on national and international occupational standards.

The levels of VQA Vocational Qualification Certificates in relation to Turkish Qualifications Framework are defined as a result of comparing the learning outcomes of the related national qualification to TQF level descriptors. TQF level descriptors, defining the minimum learning outcomes required for the qualifications levelled according to TQF, are available at <a href="http://www.tyc.gov.tr/st">http://www.tyc.gov.tr/st</a>. Since TQF is referenced to European Qualifications Framework (EQF), eight TQF levels correspond to eight EQF levels. Level 4 qualifications for which this certificate herein is issued are defined as "Employee exercises self-management for the work or study activities that are usually predictable, but are subject to change; supervises the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities."

# More information (including a description of the national qualifications system) available at: Vocational Qualifications Authority

www.myk.gov.tr www.tyc.gov.tr

### **Europass**

www.europass.gov.tr https://europass.cedefop.europa.eu/