

SERVICING AND REPAIRING VEHICLE FUEL SYSTEMS

UNIT CODE: ENG/CR/AUT/CR/3/4/A

Relationship to Occupational Standards

This unit addresses the unit of competency: **Service and repair vehicle fuel system.**

Duration of Unit: 40 hours

Unit description:

This unit specifies competencies required to service and repair vehicle fuel system. It involves, inspecting, removing, dismantling, and servicing/repairing/replacing fuel system components. It also involve assembling, testing and fitting fuel system components to the vehicle, carry out adjustment and testing the fuel system.

Summary of Learning Outcomes:

1. Inspect and remove vehicle fuel system components.
2. Dismantle, Service/repair/replace worn out vehicle fuel system components.
3. Assemble fuel system components and test for correct operation
4. Fit vehicle fuel system components, carryout adjustments, test fuel system and write report.

Learning Outcomes, Content and Suggested Assessment Methods

Learning outcomes	Content	Suggested Assessment Methods
1. Inspect and remove vehicle fuel system components.	<ul style="list-style-type: none">• Function of vehicle fuel system.• Operating principle of vehicle fuel system• Personal protective equipment (PPE).• Health, safety environment and quality regulations.• Using tools and equipment	<ul style="list-style-type: none">• Practical/observation• Oral questioning• Written test

	<ul style="list-style-type: none"> Identifying Vehicle fuel system Components. Removing Vehicle fuel system Components. Vehicle fuel system components inspections 	
2. Dismantle, Service/repair/replace worn out vehicle fuel system components.	<ul style="list-style-type: none"> Operating principle of vehicle fuel system components Construction of vehicle fuel system components Dismantling procedure of Vehicle fuel system Components Services/repairs on vehicle fuel system components. 	<ul style="list-style-type: none"> Practical/observation Oral questioning Written test
3. Assemble fuel system components and test for correct operation	<ul style="list-style-type: none"> Identifying and arranging vehicle fuel system <i>components</i> parts Vehicle fuel system components Assembling procedure. Vehicle fuel system tests and adjustments 	<ul style="list-style-type: none"> Practical/observation Oral questioning Written test Learner portfolio of evidence.
4. Fit vehicle fuel system components , carryout adjustments, test fuel system and write report,	<ul style="list-style-type: none"> Identifying, fitting and <i>adjusting</i> Vehicle fuel system components. Service /repair report. Waste disposal 	<ul style="list-style-type: none"> Practical/observation Oral questioning Written test Learner portfolio of evidence.

Suggested Methods of Instruction:

- Presentations and practical demonstrations by trainer;
- Guided learner activities
- Supervised activities and projects in a workshop;
- Visiting lecturer/trainer from the motor vehicle service and repair sector;
- Industrial visits.

Recommended Resources

Materials and supplies

- Digital instructional material including DVDs and CDs;
- Consumables for service and repair of vehicle fuel systems including;
- Pump seals and gaskets;
- fuel;
- Cleaning materials;
- Hand cleaner;
- Dusters.

Equipment

- Fuel system Instructional models;
- A fully equipped motor vehicle maintenance workshop;
- Fully functional vehicle(s)
- Functional fuel system;
- Vehicle lift/inspection pit;
- Specialist tools and diagnostic equipment appropriate for the different makes and types of vehicle that are being maintained;
- Internet access to manufacturers' technical information;
- Torque setting tools;
- Personal protective equipment (PPE) and suitable coverings to protect vehicles;
- Facilities for the disposal of waste oil and used parts;
- Customer database and systems for recording maintenance records.

Tools

- Comprehensive set of hand tools for the service and repair of motor vehicle fuel system