

SERVICING VEHICLE ELECTRICAL SYSTEMS.

UNIT CODE: ENG/CU/AUT/CR/6/4/A

Relationship to Occupational Standards

This unit addresses the unit of competency: **service vehicle electrical systems.**

Duration of Unit: 70 hours

Unit Description:

This unit specifies competencies required to service vehicle electrical systems. It involves inspecting vehicle electrical systems components, removing, dismantling, cleaning and examining electrical systems components, servicing/repairing/ replacing and assembling and testing vehicle electrical system components, fitting components, testing and preparing vehicle electrical systems service report.

Summary of Learning Outcomes

1. Inspect vehicle electrical systems components
2. Remove, dismantle, clean and examine vehicle electrical systems components
3. Service/repair/ replace and assemble and test vehicle electrical systems components
4. Fit components, test and prepare vehicle electrical systems service report.

Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Inspect vehicle electrical systems components	<ul style="list-style-type: none">• Parking and preparing Vehicle• Personal protective clothing and equipment (<i>PPE</i>)• Safety policy regulations (<i>OSHA 2007</i>)• Inspecting vehicle electrical systems• Identifying vehicle electrical systems defect(s)• Identifying cause and location of vehicle electrical systems defects• Preparing vehicle electrical systems checklist	<ul style="list-style-type: none">• Observation• Written• Oral
2. Remove, dismantle, clean and examine	<ul style="list-style-type: none">• Removing <i>Vehicle electrical components</i>	<ul style="list-style-type: none">• Observation• Written• Oral

electrical systems components	<ul style="list-style-type: none"> • Dismantling vehicle electrical components • Cleaning vehicle electrical components • Examining Serviceability of vehicle electrical components 	
3. Service/repair/replace and assemble and test vehicle electrical systems components	<ul style="list-style-type: none"> • Servicing/ Repairing vehicle electrical components • Verifying Worn/damaged vehicle electrical components • Assembling vehicle electrical components • Testing vehicle electrical system components 	<ul style="list-style-type: none"> • Observation • Written • Oral
4. Fit components, test and prepare vehicle electrical systems service report.	<ul style="list-style-type: none"> • Fitting Vehicle electrical system components • Setting <i>Beam</i> • Testing vehicle electrical systems • Completing vehicle electrical systems services and repairs • Writing vehicle electrical systems reports • Cleaning work area • Disposal of Waste in accordance with OSHA regulations(act- 2007) 	<ul style="list-style-type: none"> • Observation • Written • Oral

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

Tools, Equipment

- Hand tools
- General workshop
- General hand tools for servicing vehicle electrical systems;
- Multi-meter
- Ignition test equipment.
- Hydrometer
- High rate discharge tester
- Feeler gauge
- Lighting system including bulbs and sockets;
- Beam setter
- Battery

Materials and supplies

- PPEs
- Checklists
- Job cards
- Waste clothes
- Detergents
- Electrical cables
- Fuses

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