# SERVICING VEHICLE STEERING AND SUSPENSION SYSTEMS

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

### **Relationship to Occupational Standards**

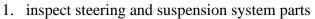
This unit addresses the unit of competency: Service Vehicle Steering And Suspension System.

#### **Duration of Unit:** 60 hours

### **Unit Description:**

This unit specifies competencies required to service vehicle steering and suspension systems. It involves inspecting steering and suspension system parts, removing steering and suspension system components, dismantling, cleaning and examining the components, servicing/repairing/ replacing and assembling steering/ suspension parts, fitting steering and suspension components and carrying out adjustment and reporting.

# **Summary of Learning Outcomes**



- 2. remove steering and suspension system components from the vehicle
- 3. dismantle, clean and examine steering and suspension system components
- 4. service/repair/ replace and assemble steering and suspension parts
- 5. fit steering and suspension components to the vehicle
- 6. Carry out adjustment and reporting.

#### Learning Outcomes, Content and Suggested Assessment Methods

Learning Outcome	Content	Suggested Assessment Methods
1. Inspect steering and suspension system parts	<ul> <li>Preparing work area, steering and suspernsion units</li> <li>Assembling <i>tools and equipment</i></li> <li>Preparing vehicle steering/ suspension system checklist</li> </ul>	<ul><li>Observation</li><li>Written</li><li>Oral</li></ul>

2. Remove steering and suspension system components	<ul> <li>Personal protective clothing and equipment (<i>ppe</i>) and safety regulations (<i>osha 2007</i>, hse&amp;q)</li> <li>Inspecting steering/ suspension systems</li> <li>Identifying faulty steering/ suspension components</li> <li><i>Technical information</i></li> <li>Raising of Vehicle</li> <li>Draining of <i>Lubricants and fluids</i></li> <li>Removing Steering/ suspension components</li> </ul>	<ul> <li>Observation</li> <li>Written</li> <li>Oral</li> </ul>
3. Dismantle, clean and examine steering and suspension system components	<ul> <li>Dismantling Steering/suspension components</li> <li>Cleaning Steering/ suspension components.</li> <li>Assessing Serviceability of steering/ suspension components</li> </ul>	<ul><li>Observation</li><li>Written</li><li>Oral</li></ul>
4. Service/repair/ replace and assemble steering and suspension parts	<ul> <li>Servicing Steering/ suspension components</li> <li>Verifying and replacing Worn/damaged steering/ suspension</li> <li>Re-assembling Steering/ suspension components</li> </ul>	<ul><li>Observation</li><li>Written</li><li>Oral</li></ul>
5. Fit steering and suspension components to vehicle	<ul> <li>Fitting Steering/ suspension components</li> <li>Replenishing lubricants and fluids</li> <li>Setting <i>Steering geometry</i></li> <li>Steering/ suspension system is tested as per the manufacturers specification</li> </ul>	<ul><li>Observation</li><li>Written</li><li>Oral</li></ul>

6. Carry out	• Completing service and repair of	Observation
adjustment	Steering/ suspension	• Written
and reporting	Cleaning work area	• Oral
	• Disposal of Waste	
	• Writing Steering/ suspension report	

# **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**

- Steering wheel
- Steering column
- Universal joint/coupling
- Steering box
- Drop arm
- Steering arm
- Tie rods
- Track arms
- Wishbone/arms
- Shock absorbers/dampers
- Strut
- Stabilizer bar
- Springs

-Coil/leaf/rubber/ Torsion bar/Pneumatic and Hydro pneumatic

- Bushes
- Hand tools
- PPEs
- Checklists
- Job cards

# Materials and supplies

Waste clothes

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- Steering fluid
- Grease
- Arm bushes
- Dust seals
- rubber boots
- detergents

