**Unit ID: 1990** 

Domain Title:

# VEHICLE COLLISION REPAIR Use and maintain electrical and mechanical tools for Vehicle collision repair

Level: 3 Credits: 4

# **Purpose**

This unit standard specifies the competencies required to use and maintain electrical and mechanical tools for vehicle collision repair. People credited with this unit standard are able to plan and prepare for work, obtain basic measurements, demonstrate use of electrical and mechanical tools, maintain electrical and mechanical tools.

This unit standard is intended for those who work as vehicle collision repairers.

# **Special Notes**

1. Entry information:

Prerequisite:

- None
- 2. To demonstrate competence, at a minimum, evidence is required of the tasks in safe use and maintenance of electrical and mechanical tools. These tasks should be performed ensuring correct identification of requirements of the task, correct selection and use of appropriate processes, tools and equipment and completing all work to specification.
- 3. Assessment evidence may be collected from a real workplace or a simulated workplace environment in which vehicle collision repair operations are carried out.
- 4. Performance of all elements in this unit standard must comply with workplace requirements or manufacturers' specifications.
- 5. Regulations and legislation relevant to this unit standard include the following:
  - Labour Act 2007(Act no 11, 2007)
  - Regulations relating to the health & Safety of employees at work under Schedule
     1 (2) of the Labour Act No.11 of 2007 and all subsequent amendments

## **Quality Assurance Requirements**

This unit standard and others within this subfield may be awarded by institutions, which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on <a href="https://www.namqa.org">www.namqa.org</a> and the Namibia Training Authority on <a href="https://www.namqa.org">www.namqa.org</a>

1

# **Elements and Performance Criteria**

#### **Element 1: Plan and prepare for work**

## Range:

Planning and preparation may include but is not limited to workplace inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.

#### Performance Criteria

- 1.1 An understanding of work instructions, including plans, specifications, quality requirements and operational processes is demonstrated.
- 1.2 Details are estimated, measured, confirmed and applied.
- 1.3 Safety requirements are followed in line with workplace safety plans and policies.
- 1.4 Measuring and calculating equipment selected to carry out tasks are consistent with industry standards.
- 1.5 Requirements of the job are checked for serviceability and any faults are rectified or reported.

# **Element 2: Obtain basic measurements**

#### **Performance Criteria**

- 2.1 Method of obtaining the measurement is selected and applied.
- 2.2 Measurements are obtained, accurate to 1 mm, using a ruler or tape.
- 2.3 Measurements are confirmed and recorded.

## Element 3: Demonstrate use of electrical and mechanical tools

#### Range

Electrical and mechanical tools may include but are not limited to portable drilling machine, angle grinders, open ended spanners, ring spanners, combination spanners, socket spanners including attachments, driving handles, extensions and adaptors, special spanners such as crow's foot and c-shaped, adjustable spanners, torque wrenches, allen wrenches (allen keys), wheel braces, screw drivers, torx bit, tools for gripping and holding such as combination pliers, long-nose pliers, side-cutting pliers, circlip pliers, multi-grip pliers, vice grip pliers, bench vices, tools for hammering and driving such as ball-point hammer, crosspein hammer, panel hammer, rubber hammer, punches, tools for cutting and forming such as hacksaws, cold chisels, wad punches, files, tools for pulling and pushing such as pullers and presses.

#### Performance Criteria

- 3.1 Electrical tools are identified and their use explained.
- 3.2 Mechanical tools are identified and their use explained.

- 3.3 Correct use of electrical tools is demonstrated according to workplace procedures.
- 3.4 Correct use of mechanical tools is demonstrated according to workplace procedures.

# **Element 4: Maintain electrical and mechanical tools**

# **Performance Criteria**

- 4.1 Electrical tools are cleaned and stored in designated storage places.
- 4.2 Mechanical tools are lubricated with manufacturer's recommended lubricants.
- 4.3 Cutting tools are sharpened according to workplace procedures.
- 4.4 Mechanical tools are cleaned and stored in designated storage places.

# **Registration Data**

Subfield:	Automotive Engineering
Date first registered:	14 March 2019
Date this version registered:	14 March 2019
Anticipated review:	2024
Body responsible for review:	Namibia Training Authority