

Domain	AUTOMOTIVE ELECTRICAL AND ELECTRONICS	Unit ID: 474
Title:	Remove and replace electrical or electronic units	
Level: 1		Credits: 4

Purpose

This unit standard specifies the competencies required to remove and replace electrical or electronic units. It includes procedures for storing electrical or electronic units. This unit standard is intended for those who work as automotive electricians.

Special Notes

1. Entry information:
 - Prerequisite
 - Unit 65 - *Apply safety rules and regulations in an automotive mechanics workshop* or demonstrated equivalent knowledge and skills.
2. To demonstrate competence, at a minimum, evidence is required of removing and replacing any two (2) electrical or electronic units.
3. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which automotive electrical and electronic operations are carried out.
4. Glossary of terms:
 - *'electrical or electronic units'* include headlights, tail-lights, electrical components and computer control units to facilitate body repair activities
5. Performance of all elements in this unit standard must comply with manufacturers' specifications, workplace specific requirements and reasonable flat rate time.
6. Regulations and legislation relevant to this unit standard include the following:
 - Labour Act, No. 6, 1992
 - Occupational Health and Safety Regulations No. 18, 1997
 - Road Traffic and Transport Regulations No. 266, 2000
 and all subsequent amendments.
7. This unit standard applies to passenger and commercial vehicles, heavy plant and earthmoving equipment.

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 and the Namibia Training Authority. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na.

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.

Tools and equipment may include but are not limited to standard tool set, jacking, support and lifting equipment and special tools for removal and replacement.

Materials may include but are not limited to spare parts and cleaning material.

Performance Criteria

- 1.1 Installation and work instructions, including repair order forms, specifications and operational details are obtained, confirmed and applied.
- 1.2 Safety requirements are followed in accordance with safety plans and policies.
- 1.3 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults rectified or reported prior to commencement.
- 1.4 Material requirements are identified and obtained in accordance with repair order form and/or specifications.
- 1.5 Materials are safely handled and located ready for use in line with workplace procedures.
- 1.6 Technical and/or calibration requirements for tools and equipment are sourced and implemented in line with workplace procedures.
- 1.7 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Remove and store electrical or electronic units

Performance Criteria

- 2.1 Procedures and information required for removing electrical or electronic units are identified and sourced in line with workplace procedures.
- 2.2 Electrical or electronic units are removed in line with workplace procedures manufacturers' specifications.
- 2.3 Removed units are handled and stored with care in line with workplace procedures and manufacturers' specifications.
- 2.4 Documents for storing electrical or electronic units are completed in line with workplace procedures.

Element 3: Replace electrical or electronic units

Performance Criteria

- 3.1 Procedures and information required for replacing electrical or electronic units repairing are identified and sourced in line with workplace procedures.
- 3.2 Electrical or electronic units are replaced in line with workplace procedures and manufacturers' specifications.
- 3.3 Documents are completed and forwarded in line with workplace procedures.

Element 4: Complete work and clean up

Range

Work completion details may include but are not limited to repair order form, sign-out form for equipment, service record book and service plan form.

Performance Criteria

- 4.1 Work is completed and appropriate personnel notified in line with workplace procedures.
- 4.2 Work area is cleared of waste, cleaned, restored and secured in line with workplace procedures.
- 4.3 Reusable material is collected and stored in line with workplace procedures.
- 4.4 Equipment used is cleaned, checked, maintained and stored in line with workplace procedures.
- 4.5 Work completion details are finalised in line with workplace procedures.

Registration Data

Subfield:	Automotive Engineering
Date first registered:	15 November 2007
Date this version registered:	15 November 2007
Anticipated review:	2011
Body responsible for review:	Namibia Training Authority