

Unit ID: 591

Domain

**AIR CONDITIONING AND
REFRIGERATION**

Title:

**Service gas household appliance as part
of air conditioning and refrigeration**

Level: 3

Credits: 6

Purpose

This unit standard specifies the competencies required to service gas household appliance. It includes inspecting, testing of gas appliance and repairing. This unit standard is intended for those who work as air conditioning and refrigeration mechanics.

Special Notes

1. Entry information:

Prerequisite

- Unit 567 - *Apply health and safety routines in an air conditioning and refrigeration workplace* or demonstrated equivalent knowledge and skills.

2. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which air conditioning and refrigeration operations are carried out.

3. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' specifications and/or company's guidelines and instructions.

4. Glossary of terms:

- '*gas household appliance*' refers to stoves and gas fridges.
- '*specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, workplace specific requirements.

5. Regulations and legislation relevant to this unit standard include the following:

- Labour Act, No. 11, 2007
- Occupational Health and Safety Regulations No. 18, 1997 and all subsequent amendments.

6. Performance of all elements in this unit standard must comply with industry standards.

7. This unit standard applies to single-phase and three-phase air conditioning and refrigeration systems.

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

Tools and equipment may include but are not limited to spanners, screw drivers, spirit level, and leak detector and burner cleaners.

Gas appliances may include but are not limited to fridge, freezer, ovens, hot plate space heaters, hot water system and stove.

Performance Criteria

- 1.1 Work instructions, including repair order forms, specifications and operational details are obtained, confirmed and applied.
- 1.2 Workplace inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements is carried out.
- 1.3 Safety requirements are followed in line with safety plans and policies.
- 1.4 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.
- 1.5 Material requirements are identified and obtained in line with job card and/or specifications.
- 1.6 Materials are safely handled and located ready for use in line with workplace procedures.
- 1.7 Technical and/or calibration requirements for tools and equipment are sourced and implemented in line with workplace procedures.
- 1.8 Environmental protection requirements are identified and applied in line with environmental plans and regulatory obligations.

Element 2: Inspect gas appliance components.

Range

Inspection methods are to include but are not limited to visual, hearing and functional assessment (including damage, corrosion, leakage, wear) in line with manufacturer's specifications.

Performance Criteria

- 2.1 Appliance components are visually inspected in line with manufacturer's and workplace procedures.
- 2.2 Tension and condition of power tool is checked in line with manufacturer's specifications.
- 2.3 Metering parts are checked for blockages.

Element 3: Test gas appliances.

Range

Operational tests may include but are not limited to mechanical tests and electrical circuit tests.

Tools and equipment may include but are not limited to multimeter and continuity tester.

Performance Criteria

- 3.1 Procedures and information required for testing gas appliance are identified and sourced in line with workplace procedures.
- 3.2 Visual inspections are carried out in line with workplace procedures.
- 3.3 Operational tests of gas are conducted.
- 3.4 Fault(s) are identified and reported to appropriate personnel in line with workplace procedures.

Element 4: Repair gas appliances.

Range

Repair methods may include but are not limited to disassembling and assembling of appliance components and replacements.

Performance Criteria

- 4.1 Procedures and information required for repairing gas appliance are identified and sourced in line with workplace procedures.
- 4.2 Safety procedures are followed in line with workplace procedures.

- 4.3 Repair methods are implemented in line with workplace procedures and legislative requirements.
- 4.4 Component parts are tagged during the dismantling to help ensure correct and efficient reassembly and stored to protect them against loss or damage.
- 4.5 Replacement components/parts are obtained in line with workplace procedures

Element 5: Complete work and clean up.

Range

Work completion details may include but are not limited to job card and sign-out form for equipment.

Performance Criteria

- 5.1 Work is completed and appropriate personnel notified in line with workplace procedures.
- 5.2 Work area is cleared of waste, cleaned, restored and secured in line with with workplace procedures.
- 5.3 Reusable material is collected and stored in line with workplace procedures.
- 5.4 Equipment used is cleaned, checked, maintained and stored in line with workplace procedures.
- 5.5 Work completion details are finalised in line with workplace procedures.

Registration Data

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