

SFS SYS 13 (SQA Unit Code - H4GR 04)

Maintain the performance of electronic security systems



Overview

This NOS sets out the skills, knowledge and understanding for you to maintain the operational performance of electronic security systems, through preventative maintenance, component replacement or adjustment.

This NOS covers the following activities:

1. Carry out preventative maintenance on systems
2. Undertake component replacement or adjustment and subsequent restoration
3. Liaise with customers during service visits

SFS SYS 13 (SQA Unit Code - H4GR 04)

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Performance criteria

Carry out preventative maintenance on systems

You must be able to:

- P1 safely identify the presence of electrical supply, into and inside, electronic security systems equipment
- P2 identify the means for safe isolation of electrical supply systems
- P3 make sure you have full details of the maintenance that you are to carry out on systems
- P4 make sure that test equipment is working properly and calibrated where necessary before starting tests
- P5 confirm maintenance arrangements with customers (including any reduction of system performance during maintenance) and third parties where necessary, that are mutually acceptable
- P6 carry out preventative maintenance at times that are convenient to your customers
- P7 carry out required maintenance in line with agreed schedules, approved procedures and codes of practice
- P8 confirm that the system meets the specification after maintenance work is completed
- P9 record results of tests and inspections accurately and fully, using the approved recording methods and formats
- P10 comply with relevant health and safety requirements whilst carrying out system maintenance
- P11 recognise any changes which may be detrimental to the performance of the transmission, system components and specification

Undertake component replacement or adjustment and subsequent restoration

You must be able to:

- P12 inform the customer effectively throughout the maintenance process
- P13 carry out adjustments and replacements in line with approved procedures and codes of practice
- P14 make sure that equipment replacements and adjustments enable systems to meet the specification
- P15 label replaced components and remove from customers' premises, in line with approved procedures
- P16 record details of component replacements and adjustments accurately and fully, using the records format

Liaise with customers during service visits

You must be able to:

- P17 give customers sufficient warning of any action you are about to take so that potential disruption to their normal activities is minimised
- P18 provide customers with details of maintenance carried out
- P19 advise customers of any deterioration in system performance
- P20 maintain a positive and professional manner with customers at all times

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Knowledge and understanding

You need to know and understand:

Legal and Organisational requirements

- K1 current relevant legislation, regulation, standards, codes of practice and guidelines relating to the operation, testing and maintenance of systems
- K2 why it is important to dispose of waste debris and surplus material safely and in line with the relevant regulations and codes of practice
- K3 your organisation's policy and procedures relevant to working at customer's premises
- K4 relevant electrical systems theory in order to understand the purpose of the results of the tests, adjustments and replacements carried out

Carry out preventative maintenance on systems

You need to know and understand:

- K5 the tests and maintenance procedures relevant to the specification, transmission and system components
- K6 the equipment being tested, including the expected results of the tests you carry out
- K7 why it is important to make sure test equipment is working properly, and calibrated where necessary
- K8 the purpose of relevant test equipment how to use it and interpret the results
- K9 why it is important to record accurate details of test results and maintenance visits, and make them available to the relevant person/s
- K10 how to discuss and agree work activities that are mutually acceptable between the customer and you
- K11 why you need to identify the presence of electrical supply and how it can be isolated safely

Undertake component replacement or adjustment and subsequent restoration

You need to know and understand:

- K12 why, when carrying out adjustments and replacements to systems it is done with the minimum inconvenience to customers
- K13 what adjustments and replacements you are authorised to make, and how to carry them out
- K14 how systems and equipment operate on which adjustments and replacements are carried out
- K15 why it is important to record accurate details of adjustments, replacements and maintenance carried out and make them available to the relevant person
- K16 how to discuss and negotiate work activities that are mutually acceptable to the customer and yourself

SFS SYS 13 (SQA Unit Code - H4GR 04)

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Liaise with customers during service visits

You need to know and understand:

- K17 why and how you must carry out maintenance with minimum inconvenience to customers, as well as maintain the safety and security of premises
- K18 how system performance can be affected by operational changes or deterioration in system components
- K19 what information you must give customers or users about service activities that you have carried out
- K20 how to communicate and work with other people

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Glossary

In these National Occupational Standards;

electrical supply systems: supply to the system components, such as primary and secondary supplies

maintenance: the process of maintaining a system for example (but not exhaustive) measurements, adjustments, calibrations, physical inspections, replacements, tests

specification: the specific detail containing design, installation, commissioning or maintenance requirements

systems: a set of components working together as an interconnecting network. For example (but not exhaustive) new installations; extensions; modifications

tests: For example (but not exhaustive) visual; electrical, operational, induced faults

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