



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **PRSTS307A Maintain and service security equipment/system**

**Release: 1**

## **PRSTS307A Maintain and service security equipment/system**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the skills and knowledge required to carry out routine servicing and repairs of a range of security equipment, systems, plant and equipment. It requires the ability to identify maintenance requirements, follow correct procedures, use safe and efficient work practices, maintain a hazard-free work area, accurately document and maintain information systems. This work applies in extra low voltage as defined through the Australian Standards As 2201 (1986) environments and would be carried out under routine supervision within organisational guidelines.

**Functional Area:** Core, Technical Security

This competency standard covers the skills and knowledge required to carry out routine servicing and repairs of a range of security equipment, systems, plant and equipment. It requires the ability to identify maintenance requirements, follow correct procedures, use safe and efficient work practices, maintain a hazard-free work area, accurately document and maintain information systems. This work applies in extra low voltage as defined through the Australian Standards As 2201 (1986) environments and would be carried out under routine supervision within organisational guidelines.

**Functional Area:** Core, Technical Security

### **Application of the Unit**

Not applicable.

### **Licensing/Regulatory Information**

Not applicable.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

Not applicable.

## Elements and Performance Criteria Pre-Content

Not applicable.

## Elements and Performance Criteria

### Elements and Performance Criteria

Element	Performance Criteria
1 Prepare for maintenance	<ul style="list-style-type: none"><li>1.1 Maintenance requirements of security equipment / systems are confirmed against work order</li><li>1.2 Types of security equipment / systems to be inspected, serviced and / or repaired are identified and checked against work order</li><li>1.3 Tools, equipment and materials are selected appropriate to job requirements and checked for operational effectiveness in accordance with manufacturer's specifications</li><li>1.4 Faulty or unsafe tools are identified and segregated for repair or replacement in accordance with organisational procedures</li><li>1.5 Potential and existing risks and hazards associated with maintenance activities are identified and controlled in accordance with OHS policies and procedures and organisational requirements</li><li>1.6 Suitable personal protective equipment is selected, used and maintained in accordance with OHS and organisational requirements</li></ul>
2 Carry out service and repair of security equipment / systems	<ul style="list-style-type: none"><li>2.1 All work is conducted using safe operating practices in accordance with OHS, legislative and organisational requirements</li><li>2.2 Security equipment / systems identified for maintenance are accessed with minimal disruption to client, services or normal work routines</li><li>2.3 Inspections and checks are conducted to identify any damage, obstruction or component wear in accordance with manufacturer's specifications and OHS requirements</li><li>2.4 Security equipment / systems are serviced and</li></ul>

- repaired in accordance with manufacturer's specifications, work order and OHS requirements
- 2.5 Complex faults or repair requirements outside area of responsibility or competence are reported to appropriate person(s) for specialist advice in accordance with organisational procedures
- 3 Complete maintenance activities
- 3.1 Serviced and / or repaired security equipment / systems are checked and confirmed for correct operation and serviceability in accordance with manufacturer's specifications and OHS requirements
- 3.2 Relevant documentation is promptly and accurately completed and processed in accordance with industry, legislative and organisational requirements
- 3.3 Work area, tools and equipment are cleaned and stored in accordance with OHS and organisational requirements
- 3.4 Malfunctions, faults, wear or damage to tools is reported for repair or replacement in accordance with organisational policy and procedures
- 3.5 Waste from service and repair activities is collected, treated and disposed or recycled in accordance with organisational and environmental requirements

## Required Skills and Knowledge

Not applicable.

## Evidence Guide

The Evidence Guide identifies the requirements to be demonstrated to confirm competence for this unit. Assessment must confirm sufficient ability to use appropriate skills and knowledge to maintain and service security equipment and systems. Assessment of performance should be over a period of time covering all categories within the Range of Variables statements that are applicable in the learning environment.

### **What critical aspects are required for evidence of competency?**

Clearly identify maintenance requirements of security equipment/systems and organise appropriate tools, equipment and materials to carry out work.

Follow safe and efficient work practices in the use of tools and equipment and accurately identify and manage risks and hazards to maintenance work and work areas.

Access security equipment/systems and methodically carry out maintenance procedures appropriate to the security equipment or system with minimal disruption to client, services or normal work routines.

Clean and store tools and equipment, reinstate work area in a clear and safe condition, and update and submit all required documentation in an accurate and prompt manner.

### **What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

types, functions and specifications of security equipment/systems and plant and equipment

operational principles of security equipment/systems

security equipment/system maintenance requirements

spare parts availability and supply

equipment calibration requirements

maintenance schedules

technical terms

common security equipment/system faults

tests to confirm equipment/system operation

building construction methods and types

electrical concepts

cable identification and handling requirements

earthing systems arrangements and requirements

confined space procedures.

### **What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some specific skills are required. These include the ability to:

read and interpret specifications, charts and diagrams

communicate in a clear and concise manner

use appropriate testing tools and equipment

use appropriate maintenance equipment

service and repair security equipment/systems and plant and equipment

test security equipment/systems

read and interpret a multimeter

identify faults

identify and correctly handle cables

work in confined spaces

methodically prioritise and organise work tasks  
solve routine problems  
estimate resource requirements  
apply safe and efficient work practices  
prepare orders, invoices and supply requisitions.

**What resources may be required for assessment?**

Access to a suitable venue and equipment.

Access to plain English version of relevant statutes and procedures.

Assignment instructions, work plans and schedules, policy documents and duty statements.

Assessment instruments, including personal planner and assessment record book.

Access to a registered provider of assessment services.

**What is required to achieve consistency of performance?**

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and observed by the assessor. The competency is to be demonstrated in a range of situations, which may include involvement in related activities normally experienced in the workplace.

Evidence of underpinning knowledge understanding of processes and principles can be gained through thorough questioning and by observation of previous work.

**Assessment against this unit may involve the following:**

Continuous assessment in a setting that simulates the conditions of performance described in the elements, performance criteria and range of variables statement that make up the unit.

Continuous assessment in the workplace, taking into account the range of variables affecting performance.

Self-assessment on the same terms as those described above.

Simulated assessment or critical incident assessment, provided that the critical incident involves assessment against performance criteria and an evaluation of underpinning knowledge and skill required to achieve the required performance outcomes.

**Key competency levels**

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added.

Information below highlights how these processes are applied in this competency standard.

**1** - perform the process

**2** - perform and administer the process

**3** - perform, administer and design the process

How can **communication of ideas and information** be applied? **(2)**

Maintenance requirements of security equipment/systems may be clarified with relevant persons

How can **information be collected, analysed and organised**? **(2)**

Results of conducted inspections and checks may be accurately documented and organised in reports for review.

How are **activities planned and organised**? **(2)**

Access to security equipment/systems may be organised with minimal disruption to client, services or normal work routines.

How can **team work** be applied? **(2)**

Team work may be applied in methods and procedures to complete maintenance tasks within designated timeframes.

How can the use of **mathematical ideas and techniques** be applied? **(2)**

Mathematical techniques may be used to accurately estimate resource requirements and prioritise work tasks

How can **problem solving skills** be applied?(2)

Complex faults or repair requirements may be accurately identified and promptly reported for specialist advice.

How can the **use of technology** be applied? (2)

Technology may be used to communicate, source and record information. It may also be used to carry out testing activities.

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test security equipment/systems  
read and interpret a multimeter  
identify faults  
identify and correctly handle cables  
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## Range Statement

The Range of Variables provides information about the context in which the unit of competency is carried out. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables may be present for this particular unit:

**Maintenance may include:**

- inspections, lubrication, cleaning and adjustments
- routine repairs
- identification and replacement of worn parts
- confirmation of operational effectiveness
- back-ups
- changing user codes.

**Security equipment and systems may include:**

- detection devices, audible/visual warning devices
- cameras, monitors and control equipment
- control panels, intercoms
- wireless equipment, car alarms
- electronic readers, electronic recognition controls
- locks and locking systems
- grills, lighting, boom gates, turnstiles
- bank pop-up screens
- smoke detection devices
- electric/mechanical fire safety and fire locking systems
- power supplies, batteries
- security doors and door controls.

**Security systems may be:**

- electronic
- mechanical
- computerised
- procedural.

**Equipment may include:**

- personal protective equipment
- electronic instruments and equipment
- diagnostics and testing equipment
- installation tools and equipment
- staple guns, ladders, cherrypickers
- generators, extension cords, torches and lighting
- mobile phones and communications equipment
- cameras, computers
- motor vehicles.

**Security systems may be:**

- electronic
- mechanical
- computerised
- procedural.

**Work order information may include:**

- work schedules and completion dates

job requirements and tasks  
specific client requirements  
access to site and specific site requirements  
resource requirements  
OHS requirements  
compliance with relevant legislation  
budget allocations  
warranties and service information.

**Tools and equipment may include:**

compute, software, back-up disks  
test equipment (multimeter)  
hand tools, fixing tools, crimp tools, IDC tools  
strippers, router, file, drill, power saw  
lockpick, pick gun, followers  
glass break tester, spirit level  
soldering iron, welder  
ladder, hoist, drop sheet, batteries  
personal protective equipment  
communications equipment.

**Materials may include:**

resistors, parts and components  
wire and cable, fixings, solder, insulation tape  
springs, pins, oil, silicon, grease  
glass cleaner/lens cleaner  
glue, paint, patch materials  
sealing compound, cleaning compounds  
electronic components.

**Risks and hazards may include:**

non-compliance with building codes and regulations  
exposed electrical wiring  
manual handling  
chemical hazards (battery corrosion)  
exposure to:  
asbestos  
dust  
noise  
live power  
vermin  
water  
glass fibre  
building debris  
natural and other gas build-up.

**OHS policies and procedures may relate to:**

hazardous and risk assessment mechanisms  
implementation of safety regulations  
safety training  
safety systems incorporating:  
work clearance procedures

isolation procedures  
gas and vapour  
monitoring/testing procedures  
use of protective equipment and clothing

use of codes of practice.

**Organisational requirements may relate to:**

legal and organisational operational policies and procedures  
operations manuals, induction and training materials  
insurance policy agreements  
client and organisational confidentiality requirements  
organisational goals, objectives, plans, systems and processes  
employer and employee rights and responsibilities  
own role, responsibility and delegation  
quality and continuous improvement processes and standards  
client service standards  
defined resource parameters  
OHS policies, procedures and programs  
emergency and evacuation procedures  
duty of care, code of conduct, code of ethics  
access and equity policy, principles and practice  
records and information systems and processes  
communication channels and reporting procedures.

**Personal protective clothing and equipment may include:**

masks, safety glasses, head protection, ear muffs  
safety boots, knee pads  
gloves  
warning hats, flashing lights  
warning signs and tapes  
fire extinguisher  
first aid kit.

**Safe operating practices may include:**

working safely around electrical wiring, cables and overhead power lines  
working safely around tools and equipment  
hazard recognition  
emergency procedures  
awareness of electrical hazards  
following confined spaces procedures  
administering first aid .

**Applicable legislation, codes and national standards may relate to:**

compliance with Australian building codes and regulations  
compliance with Australian Communications Authority (ACA) cabling standards  
relevant Commonwealth/State/Territory legislation which affect organisational operation:  
Occupational Health and Safety and safe work practices  
environmental issues  
equal employment opportunity  
industrial relations  
anti-discrimination and diversity

licensing arrangements

Australian Standards, quality assurance and certification requirements

relevant industry Codes of Practice

trade practices, award and enterprise agreements

privacy requirements, freedom of information.

**Access may involve:**

use of access code

disablement of system

removal of housing

access token, keys

phone line access, modem.

**Disruptions may affect:**

security

time

access

noise

use of communications equipment

business operations.

**Appropriate person(s) may include:**

clients

site managers

project managers

engineers and technicians

technical experts

line managers/supervisors

colleagues

regulatory personnel

security consultants.

**Documentation may relate to:**

work log

service/maintenance records

equipment/system problems/faults

warranty conditions and allowances

recommendations for repairs

operational checks and maintenance conducted

testing and commissioning results

parts and components replaced, materials used

costings, receipts, invoice.

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bank pop-up screens

smoke detection devices

electric/mechanical fire safety and fire locking systems

power supplies, batteries

security doors and door controls.

**Security systems may be:**

electronic

mechanical

computerised

procedural.

**Equipment may include:**

personal protective equipment

electronic instruments and equipment

diagnostics and testing equipment

installation tools and equipment

staple guns, ladders, cherrypickers

generators, extension cords, torches and lighting

mobile phones and communications equipment

cameras, computers

motor vehicles.

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procedural.

**Work order information may include:**

work schedules and completion dates

job requirements and tasks

specific client requirements

access to site and specific site requirements

resource requirements

OHS requirements

compliance with relevant legislation

budget allocations

warranties and service information.

**Tools and equipment may include:**

compute, software, back-up disks

test equipment (multimeter)

hand tools, fixing tools, crimp tools, IDC tools  
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**Risks and hazards may include:**

non-compliance with building codes and regulations  
exposed electrical wiring  
manual handling  
chemical hazards (battery corrosion)  
exposure to:  
asbestos  
dust  
noise  
live power  
vermin  
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glass fibre  
building debris  
natural and other gas build-up.

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use of protective equipment and clothing

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**Organisational requirements may relate to:**

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organisational goals, objectives, plans, systems and processes  
employer and employee rights and responsibilities  
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working safely around tools and equipment  
hazard recognition  
emergency procedures  
awareness of electrical hazards  
following confined spaces procedures  
administering first aid .

**Applicable legislation, codes and national standards may relate to:**

compliance with Australian building codes and regulations  
compliance with Australian Communications Authority (ACA) cabling standards  
relevant Commonwealth/State/Territory legislation which affect organisational operation:  
Occupational Health and Safety and safe work practices  
environmental issues  
equal employment opportunity  
industrial relations  
anti-discrimination and diversity

licensing arrangements  
Australian Standards, quality assurance and certification requirements  
relevant industry Codes of Practice  
trade practices, award and enterprise agreements  
privacy requirements, freedom of information.

**Access may involve:**

use of access code  
disablement of system  
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security

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**Appropriate person(s) may include:**

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regulatory personnel

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operational checks and maintenance conducted

testing and commissioning results

parts and components replaced, materials used

costings, receipts, invoice.

## **Unit Sector(s)**

Not applicable.