

# CPCPGS4023 Install, commission and service Type B gas appliances

Release: 3

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#### **Modification History**

Release 3 This version first released with CPC Construction, Plumbing and Services Training Package Release 6.2.

Updated imported prerequisite unit UEENEEP012A Disconnect/reconnect composite appliances connected to low voltage installation wiring to UEERL0004 Disconnect-reconnect electrical equipment connected to low voltage (LV) installation wiring.

Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.

Typographical error corrected in Element and Performance Criteria 6.2.

Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and is not equivalent to CPCPGS4023B Install, commission and service Type B gas appliances. Updated to meet the Standards for Training Packages 2012.

# **Application**

This unit specifies the skills and knowledge required to install, commission and service Type B gas appliances, from the gas isolation valve and electrical isolation switch to the flue spigot on the appliance.

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, regulatory or certification requirements.

## Pre-requisite Unit

CPCPCM2043 Carry out WHS requirements

UEERL0004 Disconnect-reconnect electrical equipment connected to low voltage (LV)

installation wiring.

#### **Unit Sector**

Plumbing

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#### **Elements and Performance Criteria**

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

- Obtain authority to undertake work on Type B gas appliances
- 1.1 Conduct a detailed site inspection to assess, analyse, interpret and confirm design specification.
- 1.2 Liaise with designer and gas authorities to clarify and resolve identified design specification matters.
- 1.3 Obtain formal authority to proceed with installation and commissioning before commencing work.
- 2 Prepare for work.
- 2.1 Access, read and determine installation, commissioning and service requirements from job specifications, relevant Australian Standards, codes, manufacturer's specifications and jurisdictional requirements.
- 2.2 Identify and apply workplace policies and procedures, work health and safety (WHS) and environmental requirements.
- 2.3 Conduct gas system and electrical safety checks and isolation procedures and record to manufacturer and other authorities' requirements before commencing work.
- 2.4 Select appropriate tools and equipment, including personal protective equipment (PPE).
- 3 Obtain materials and install Type B gas appliances.
- 3.1 Identify and obtain gas system components, electrical or electronic components and controls and other required installation materials from the job specifications, relevant Australian Standards, codes, manufacturer's specifications and jurisdictional requirements.
- 3.2 Obtain component specifications and manufacturers' installation and servicing manuals.
- 3.3 Perform installation of appliance components, including valve trains, burners and associated pipework and flue systems.
- 3.4 Calculate and identify ventilation systems.

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- 3.5 Check suitability of electrical components, including terminations and electrical wiring and wiring enclosures.
- 3.6 Visually inspect installations at each stage of work to ensure compliance with specifications and absence of damaged or faulty equipment and materials.
- 4 Commission and test Type B gas appliances.
- 4.1 Select testing and servicing equipment appropriate to the requirement and check and prepare for use.
- 4.2 Conduct gas and electrical safety checks and isolation procedures, including purging, and record as required before testing and commissioning is commenced.
- 4.3 Perform test operational parameters of individual components and adjust to conform to specifications.
- 4.4 Perform test appliance operations with and without fuel and adjust as necessary and record results.
- 4.5 Set air flow rate and gas rate in accordance with relevant standards.
- 4.6 Analyse flue gases according to recognised industry practice.
- 4.7 Perform test operations of critical safety interlocks to ensure they are operational and set points are as per relevant standards.
- 5 Service Type B gas appliances.
- 5.1 Analyse defect reports or operational records to identify the nature and possible cause of faults or out-of-specification performance.
- 5.2 Conduct electrical and gas safety checks and isolation procedures and record before servicing work is commenced.
- 5.3 Read and correctly interpret plans and diagrams to identify potential gas system and electrical fault pathways and locations.
- 5.4 Select and apply appropriate testing techniques, procedures and equipment to diagnose system faults or discrepancies.

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- 5.5 Identify and confirm cause of fault or out-of-specification performance.
- 5.6 Analyse options for correction and select the most appropriate corrective action.
- 5.7 Conduct repair, replacement or adjustment according to manufacturer specifications or service manuals.
- Test to ensure critical safety interlocks are operational and set points are as per relevant standard.
- 5.9 Assess appliance to ensure compliance with relevant standards and manufacturer specifications prior to recommissioning and returning to service.
- 6 Finalise work.
- 6.1 Clear the work area, and dispose of, reuse or recycle materials in accordance with state and territory legislation and workplace policies and procedures.
- 6.2 Clean tools and equipment, check for serviceability and report any damage, and store and secure.
- 6.3 Complete documentation according to workplace requirements.

#### **Foundation Skills**

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## **Unit Mapping Information**

Supersedes and is not equivalent to CPCPGS4023B Install, commission and service Type B gas appliances.

#### Links

Companion volumes to this training package are available at the VETNet website - <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad</a>

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