

Title	Maintain a pneumatic power system		
Level	3	Credits	7

Purpose	People credited with this unit standard are able to prepare to maintain, carry out preliminary sensory checks on, maintain, and return to operation, a pneumatic power system.
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Classification	Mechanical Engineering > Fluid Power - Pneumatics
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Available grade	Achieved
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Prerequisite	Unit 20598, <i>Shut down for maintenance, and start up, a pneumatic power system</i> , or demonstrate equivalent knowledge and skills.
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Guidance Information

1 References

Health and Safety at Work Act 2015;
Resource Management Act 1991.

2 Definitions

Accepted industry practice – approved codes of practice and standardised procedures accepted by the wider mechanical engineering industry sectors as examples of best practice.

Components – filters, breathers, traps, drains, lubricators, tubing or other system associated parts.

PPE – refers to personal protective equipment and may include but is not limited to protective clothing, gloves, safety glasses, headwear, footwear, hearing protection, and safety devices.

Service – the stripping of a component to its individual parts for activities such as cleaning, lubricating, repair and/or replacement.

Workplace procedures – procedures used by the organisation carrying out the work and applicable to the tasks being carried out. Examples are – standard operating procedures, safety procedures, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

Outcomes and performance criteria

Outcome 1

Prepare to maintain a pneumatic power system.

Performance criteria

- 1.1 Filter types are described in terms of their function and location within a pneumatic power system.
- Range examples are – main line, air service, oil removal, odour removal.
- 1.2 Routine preventive maintenance activities are described in accordance with the selected system and workplace procedures.
- Range examples are – system cleaning, filter checks.
- 1.3 Consequences of a poorly maintained system are identified.
- Range three consequences.
- 1.4 Tools and equipment are prepared in accordance with the selected system and accepted industry practice.
- Range examples are – containers, blanking flanges, plates and plugs, absorbent materials, hand tools, cleaning equipment and solvents.
- 1.5 Procedure for making system safe is established in accordance with accepted industry practice prior to commencing maintenance.

Outcome 2

Carry out preliminary sensory checks on a pneumatic power system.

Range sensory – sight, sound, touch, smell;
examples of checks are – leaks, tube condition, filters, couplings, temperatures, gauges and indicators, excessive or unusual noise, machine odour.

Performance criteria

- 2.1 Checks are carried out in accordance with health and safety legislation and accepted industry practice, and results communicated to the supervisor.

Outcome 3

Maintain a pneumatic power system.

Performance criteria

- 3.1 System is made safe in accordance with workplace procedures and confirmed with supervisor.
 Range examples are – isolation, depressurisation, PPE, safety supports.
- 3.2 Components to be serviced are confirmed with supervisor.
- 3.3 Components are removed without damage to the system or component.
- 3.4 Components are serviced in accordance with manufacturer’s instructions or accepted industry practice.
- 3.5 Components are replaced without damage to the system or component.

Outcome 4

Return a pneumatic power system to operation.

Performance criteria

- 4.1 System is re-energised in accordance with workplace procedures and confirmed with supervisor.
 Range examples are – electrical, mechanical, and potential energy.
- 4.2 System performance is verified with supervisor to ensure it meets operational requirements.
- 4.3 Work area is cleaned in accordance with legislative requirements and accepted industry practice.

Replacement information	This unit standard and unit standard 20613 replaced unit standard 2722.
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Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 May 2004	31 December 2014
Review	2	18 March 2011	31 December 2022
Review	3	17 August 2017	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.