

Title	Service hydraulic power system components		
Level	4	Credits	20

Purpose	People credited with this unit standard are able to prepare to service hydraulic power system components; remove components from the system; service system components; and return system to operation.
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Classification	Mechanical Engineering > Fluid Power - Hydraulics
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Available grade	Achieved
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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.
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 in order to return the component to the manufacturer’s original specifications.
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.
- 3 Recommended for entry
Unit 20613, *Maintain a hydraulic power system*.

Outcomes and performance criteria

Outcome 1

Prepare to service hydraulic power system components.

Range three components;
examples of components are – filters, tubing and piping, pumps, valves, motors.

Performance criteria

1.1 Components to be serviced are identified and servicing requirements are obtained and followed in accordance with workplace procedures.

Range examples are – job cards, maintenance schedules.

1.2 Servicing resources are prepared in accordance with component type and workplace procedures.

Range examples are – tools, cleaning materials and equipment; PPE; servicing instructions.

1.3 System is made safe in accordance with workplace procedures.

Range isolation, depressurisation.

1.4 System is cleaned and made ready for maintenance in accordance with workplace procedures.

Outcome 2

Remove components from the hydraulic power system.

Performance criteria

2.1 Component removal instructions are followed in accordance with accepted industry practice.

2.2 Correct tools are used to remove components in accordance with accepted industry practice.

2.3 Components are removed in accordance with accepted industry practice without damage to system or components.

Outcome 3

Service hydraulic power system components.

Performance criteria

3.1 Component servicing instructions are followed in accordance with accepted industry practice.

3.2 Correct tools, equipment, and materials are used to service components in accordance with accepted industry practice.

3.3 Servicing procedures are followed in accordance with manufacturer's specifications and accepted industry practice.

- 3.4 Instances of component non-conformance are reported or recorded in accordance with workplace procedures.
- 3.5 Components are calibrated, as applicable, prior to re-installation in system in accordance with accepted industry practice or manufacturer's specifications.
- 3.6 Components are replaced without damage to component or system.
- 3.7 Components scheduled for storage are prepared in accordance with manufacturer's specifications and industry practice.

Range long-term storage, short-term storage.

Outcome 4

Return hydraulic power system to operation.

Performance criteria

- 4.1 System is re-energised in accordance with workplace procedures.
- Range examples are – electrical, mechanical, and potential energy.
- 4.2 System is monitored to ensure performance meets operational specifications.
- 4.3 System and worksite is cleaned in accordance with workplace procedures.

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	17 January 1995	31 December 2012
Revision	2	14 April 1997	31 December 2012
Revision	3	5 January 1999	31 December 2012
Revision	4	23 May 2001	31 December 2012
Review	5	25 May 2004	31 December 2014
Review	6	18 March 2011	31 December 2022
Review	7	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.