

Title	Service hydraulic system components under supervision		
Level	3	Credits	20

Purpose	People credited with this unit standard are able, under supervision, on a hydraulic system to: prepare for servicing of hydraulic system components; remove components from the hydraulic system; undertake servicing of hydraulic system components; and return hydraulic system to service.
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Classification	Mechanical Engineering > Fluid Power - Hydraulics
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Available grade	Achieved
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Guidance Information

1 Legislation and references

Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

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

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

Components refers to filters, breathers, traps, drains, lubricators, tubing and piping, pumps, valves, and motors or other associated hydraulic system 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 refers to stripping 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 specifications or normal performance.

Workplace procedures refers to 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 skills and knowledge

It is recommended that people hold credits for Unit 20613, *Maintain a hydraulic system*, or demonstrate equivalent knowledge and skills, before being assessed against this unit standard.

4 Assessment information

All evidence must be in accordance with workplace procedures.

Outcomes and performance criteria

Outcome 1

Prepare for servicing of hydraulic system components.

Range may include – coolers, reservoir, gauge, filter, control valves, pump, motor, cylinder, accumulator, conductors.

Performance criteria

1.1 Components to be serviced are identified and confirmed with supervisor.

1.2 Servicing requirements are obtained and followed.

Range may include – job cards, maintenance schedules.

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

Range may include – tools, cleaning materials and equipment, PPE, component removal and servicing instructions.

1.4 System is made safe in accordance with workplace procedures and confirmed with supervisor.

Range isolation, depressurisation, PPE.

1.5 System are cleaned and ready for maintenance.

Outcome 2

Remove components from the hydraulic system.

Range components from outcome 1.

Performance criteria

2.1 Component removal instructions are followed.

2.2 Correct tools are used to remove components.

2.3 Components are removed in accordance with workplace procedures, and without damage to system or component.

Outcome 3

Undertake servicing of hydraulic system components.

Range components from outcome 1.

Performance criteria

- 3.1 Component servicing instructions are followed.
- 3.2 Correct tools, equipment, and materials are used to service components.
- 3.3 Servicing is undertaken in accordance with identified servicing requirements, manufacturer's specifications, and workplace procedures.
- 3.4 All instances of component non-conformance are reported to supervisor and recorded in accordance with workplace procedures.
- 3.5 Components are calibrated, as applicable, prior to replacement in system.
- 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 workplace procedures.

Range long and short-term storage.

Outcome 4

Return hydraulic system to service.

Performance criteria

- 4.1 System is re-energised in accordance with workplace procedures and supervisor is advised.
Range may include – electrical, mechanical, and potential energy.
- 4.2 System is monitored to ensure performance meets operational requirements.
- 4.3 System and worksite are cleaned in accordance with legislative requirements and workplace procedures.

Planned review date	31 December 2027
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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 2015
Revision	2	14 April 1997	31 December 2015
Revision	3	5 January 1999	31 December 2015
Revision	4	23 May 2001	31 December 2015
Review	5	25 May 2004	31 December 2015
Review	6	18 March 2011	31 December 2015
Review	7	18 July 2013	31 December 2022
Review	8	17 August 2017	N/A
Review	9	30 March 2023	N/A

Consent and Moderation Requirements (CMR) reference

0014

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.