

Title	Carry out general service checks on non-electric forklifts and forklift attachments		
Level	3	Credits	4

Purpose	People credited with this unit standard are able to carry out general service checks on non-electric forklifts and forklift attachments.
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Classification	Motor Industry > Automotive Preventive Maintenance
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Available grade	Achieved
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Prerequisites	Driver's licence with F endorsement.
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Guidance Information

- 1 It is recommended that people hold credit for Unit 15471, *Demonstrate knowledge of materials handling machine types, their applications, operation, and safety precautions* before being assessed against this unit standard.
- 2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, and company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 3 Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015;
Vehicle Inspection Requirements Manual (VIRM) In-service Certification;
The Official New Zealand Road Code;
New Zealand Standard NZS/ANSI/ITSDF B56.1:2005 *Safety standard for low lift and high lift trucks*.
- 4 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.
- 5 Definitions
Company requirements refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.
Service information refers to information such as technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

Suitable tools and equipment refer to industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

- 6 Range
This unit standard includes a minimum of – two non-electric forklifts. These may be diesel, petrol, LPG (liquefied petroleum gas), or CNG (compressed natural gas) powered forklifts.
- 7 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.

Outcomes and performance criteria

Outcome 1

Carry out general service checks on non-electric forklifts and forklift attachments.

Performance criteria

- 1.1 The level and extent of service required is determined from manufacturer service schedules.
- 1.2 A visual inspection is carried out on the non-electric forklift, and any faults found are recorded and reported.
- 1.3 The non-electric forklift is tested for operation, and any faults found are recorded and reported.
- 1.4 All oil and filter changes, and lubricating requirements are completed.
- 1.5 The cooling system is checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- Range may include – coolant level, inhibitor strength, radiator, hoses, pipes and joints, expansion tank, fan, drive belts.
- 1.6 The fuel system is checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- Range may include – fuel filter, fuel injection system, connections, pipes, air cleaner, fuel tank, anchoring points, pressure, governor, leaks.
- 1.7 The batteries and cables are checked for serviceability and charged or replaced.
- Range may include – leaks; corrosion; state of charge; high rate discharge test; general condition of cables, terminals and hold-down brackets.

- 1.8 Mast and adjacent components are checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- Range may include – wear, deformation, cracking, corrosion; lift chain, lift cylinder, back rest, tilt cylinder, forks, fork carriage, shim adjustment, cylinder rod, rollers, anchoring points, pump, valve bank.
- 1.9 Servicing procedures for forklift attachments are identified.
- Range may include – wear, deformation, cracking, corrosion; bearings, pivots, chain drives, backrest, cylinders, forks, fork carriage, shim adjustment, cylinder rod, rollers, anchoring points, wheels, wire or cable guidance system.
- 1.10 Attachment is checked for serviceability, servicing is carried out, and any defects identified from the checks are recorded.
- Range may include – wear, deformation, cracking, corrosion, hydraulics, wire or cable guidance system.
- 1.11 Steering system is checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- Range may include – steering axle, drive axle; steering wheel, wheel bearings, gearbox, orbital steering, linkages, knuckles and joints, axles, turning radius, pipes, leakage, king pins.
- 1.12 Brake system is checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- Range may include – fluid levels and pressure, air pressure, pedal height and play, stop lamp, brake booster, wheel brake, brake drum, brake force; foot and service brake.
- 1.13 Hydraulic system is checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- 1.14 Tyres and wheels are inspected for serviceability, and any defects identified are reported to the supervisor or customer.
- Range may include – tyre condition, tyre size and construction matching rim or wheel rating and size, inflation pressures, retaining nuts and bolts condition and torque settings, rim (fatigue cracks, worn, damaged and rusted components), lock ring beading and groove condition, hub condition.

- 1.15 Electrical equipment is checked for serviceability and operates in accordance with manufacturer specifications.
- Range may include – batteries, switches, fuses, horn, lamps, charger, wiring.
- 1.16 The engine is started and run until its normal operating temperature is reached and the ignition timing is checked and adjusted.
- 1.17 The engine and drive line are checked for serviceability, adjustments are carried out, and any defects identified from the checks are recorded.
- Range may include – fuel leaks, coolant leaks, coolant temperature, air leaks and pressure, hydraulic leaks and pressure, belts and belt tensions, universal and CV joints, noise level.
- 1.18 All preventive maintenance programme items are implemented and completed, the non-electric forklift is cleaned down, and appropriate labels affixed in accordance with the non-electric forklift's service record book.
- 1.19 Non-electric forklift is operated in all functions to confirm all service checks have been completed.
- 1.20 The service report is completed and forwarded to the supervisor or customer.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 March 2008	31 December 2022
Review	2	29 July 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014
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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 MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.