Title	Carry out an annual safety inspection on a forklift, and complete an inspection report		
Level	4	Credits	4

Purpose	This unit standard is intended for people in the materials handling equipment repair industry.
	People credited with this unit standard are able to prepare to carry out inspection; and to inspect and fill out the inspection report for: overhead guard, mast, frame, and attachments; engine and cooling system, transmission, electrical, and liquefied petroleum gas (LPG) requirements; battery electric forklift requirements; braking, steering, and wheel requirements; hydraulic requirements; and miscellaneous requirements; and complete the inspection report.

Classification	Motor Industry > Automotive Preventive Maintenance
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Available grade	Achieved	
Prerequisites	Driver's licence with F endorsement.	

Guidance Information

- 1 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.
- 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) Inspection and certification of forklifts; Land Transport Rules; New Zealand Standard NZS/ANSI/ITSDF B56.1:2005 Safety standard for low lift and high lift trucks; New Zealand Forklift Industry Association, Annual Safety Inspection Report – forklift trucks.
- 3 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.

4 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 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.

- 5 Assessment against this standard may include any motorised (including LPG fuelled) forklift or battery electric forklift.
- 6 For this unit standard, it is essential that the practical assessment evidence is obtained in the workplace under normal workplace conditions.
- 7 It is recommended that the Annual Safety Inspection Report forklift trucks be used when carrying out this safety inspection.

Outcomes and performance criteria

Outcome 1

Prepare to carry out inspection.

Performance criteria

- 1.1 Forklift design is checked to ensure it complies with relevant standards and all alterations have been approved in accordance with NZS/ANSI/ITSDF B56.1 requirements.
- 1.2 General information is noted in accordance with annual safety inspection report sheet.
 - Range may include but is not limited to owner, forklift name plate, specifications, forklift capacity, load chart, maintenance requirements, number plate registration, operator qualifications, decal legible.

Outcome 2

Inspect overhead guard, mast, frame, and attachments and fill out the inspection report.

Performance criteria

- 2.1 Overhead guard and attachments are inspected, and any defects are recorded in the inspection report.
 - Range may include but is not limited to alterations, corrosion, damage, support legs and mountings, strength, operation.

- 2.2 Mast and attachments are inspected, and any defects are recorded in the inspection report.
 - Range mast chains, drop test, tilt test, mounts for wear, cracks; forks – clearance, cracks, straightness of blades, angle, height of tips, positioning lock, wear, capacity rating; carriage – wear, cracks, roller shimming, pin retention, sideshift, cylinder, hose, leaks; load backrest extension – mounting, condition, requirement.
- 2.3 Frame and counterweight attachments are inspected, and any defects are recorded in the inspection report.

Range cracks, distortion, counterweight mounting.

Outcome 3

Inspect engine and cooling system, transmission, electrical, and LPG requirements and fill out the inspection report.

Performance criteria

- 3.1 Engine, cooling system, and attachments are inspected, and any defects are recorded in the inspection report.
 - Range engine operation, oil leaks, fuel leaks, exhaust leaks, governor operation, mountings, shutoff, abnormal noise; cooling system radiator cap, belts, hoses, pump, leaks.
- 3.2 Transmission, differential, and attachments are inspected, and any defects are recorded in the inspection report.
 - Range clutch pedal operation, inching operation, oil leaks, cooler hoses, mountings, drive operation.
- 3.3 Electrical system is inspected, and any defects are recorded in the inspection report.
 - Range starting, battery retention, battery cleanliness, cable insulation, wiring, warning devices, lights, indicators, gauges.
- 3.4 An LPG system is inspected, and any defects are recorded in the inspection report.

Range certification, mounting of tanks, hoses, leaks.

Outcome 4

Inspect battery electric forklift requirements and fill out the inspection report.

Performance criteria

- 4.1 Battery electrical forklift system is inspected, and any defects are recorded in the inspection report.
 - Range weight of battery to specification, controls and cable insulation, connectors, battery mounting and retention, battery charging, charging and disconnecting switch, terminal corrosion, travel controls, electrical protection, battery cleanliness, battery and cell covers.

Outcome 5

Inspect braking, steering, and wheel requirements and fill out the inspection report.

Performance criteria

5.1 Brake system is inspected, and any defects are recorded in the inspection report. service brake – pedal operation, linkages, master cylinder, hose, Range leaks, drive tests laden and unladen, stopping distance tests; park brake – linkage, interlock, gradient test, operational test. 5.2 Steering system is inspected, and any defects are recorded in the inspection report. straight line operation, leaks, even turning circle, hub, king pins; Range may include - ball joints. 5.3 Wheels are inspected, and any defects are recorded in the inspection report. tyres – condition, wear; may include - rating, pressure; Range

Outcome 6

Inspect hydraulic requirements and fill out the inspection report.

Performance criteria

6.1 Hydraulic system is inspected, and any defects are recorded and reported.

Range handle lever operation, hose pipes and tube, leaks, fittings.

rims – deformation, cracks, rings, studs, nuts.

Outcome 7

Inspect miscellaneous requirements and fill out the inspection report.

Performance criteria

- 7.1 Floor plate is inspected for security, and any defects are recorded in the inspection report.
- 7.2 Operator seat is inspected, and any defects are recorded in the inspection report.

Range security, mounting, adjustment, restraint system.

7.3 Rear view mirror is inspected, and any defects are recorded in the inspection report.

Range security adjustment, damage, cleanliness.

7.4 Forklifts working in hazardous areas are inspected, and hazard protection report is attached to the inspection report.

Outcome 8

Complete the inspection report.

Performance criteria

8.1 The inspection report is completed.

Range includes but is not limited to – non-compliant items noted, remarks and recommendations noted, organisation and technician's information noted.

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 April 2021	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 MITO New Zealand Incorporated <u>info@mito.org.nz</u> if you wish to suggest changes to the content of this unit standard.