Title	Service an automotive battery		
Level	3	Credits	3

Purpose	This unit standard is for people who wish to enter or are employed in the motor industry. People credited with this unit standard are able to determine the serviceability of an automotive battery, charge an automotive battery, replace an automotive battery, and jump-start a vehicle or machine.

Classification	Motor Industry > Automotive Electrical and Electronics	
Available grade	Achieved	

#### **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, company requirements and legislative requirements. This includes the knowledge and use of suitable tools and equipment.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of the Health and Safety at Work Act 2015; the Hazardous Substances and New Organisms Act 1996; and any subsequent amendments or replacements.
- 3 Definitions

*Company requirements* – 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.

*Machines* may include – forklifts, earth moving equipment, grader equipment, loaders, dozers, tractors, agricultural equipment, dump trucks, prime movers; electric machines including – forklift, walk-behind pallet, ride-on pallet, reach truck, order picker, counterbalance truck, turret truck.

Service information may include – technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.

4 This unit standard is to cover batteries used in 12-volt or 24-volt vehicles or machines, and does not cover the high-voltage systems used in hybrid electric or battery electric vehicles.

# Outcomes and performance criteria

# Outcome 1

Determine the serviceability of an automotive battery.

### Performance criteria

- 1.1 Test equipment is selected that will enable the serviceability of the battery to be determined.
- 1.2 Battery condition is tested and compared to service information.
- 1.3 Test results are recorded and serviceability is determined.

### Outcome 2

Charge an automotive battery.

## Performance criteria

- 2.1 Electrolyte level is checked and topped up where applicable.
- 2.2 Battery is charged, full charge is confirmed and results are recorded.

### Outcome 3

Replace an automotive battery.

### Performance criteria

- 3.1 Correct battery is selected.
- 3.2 Replacement battery is fitted.
- 3.3 Correct operation of the battery is confirmed.

### Outcome 4

Jump-start a vehicle or machine.

### **Performance criteria**

- 4.1 Jump-starting device is connected.
- 4.2 Engine is started and run for recommended time.
- 4.3 Jump-starting device is disconnected.
- 4.4 Engine is restarted to ensure the battery has sufficient charge.

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Planned review date	31 December 2022

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 October 2017	N/A

# Consent and Moderation Requirements (CMR) reference

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.