

**Field      Engineering and Technology****Review and development of *Automotive Electrical and Electronics* unit standards**

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Motor Industry	Automotive Electrical and Electronics	30879

MITO New Zealand Incorporated (MITO) has completed the review and development of unit standards for the Motor Industry.

**Date new versions published**      **September 2018**

**Planned review date**      **December 2023**

**Summary**

MITO reviewed unit standard 30879 to include further knowledge to ensure the safety of personnel when working on or around electric vehicles.

MITO also developed new unit standards to meet the graduate profile outcomes in New Zealand Certificate qualifications.

The review and development of these unit standards has resulted in fit-for-purpose assessment content made available to industry that reflects current industry practice for electric vehicles or machines.

MITO's electric vehicle working group supported and guided the review and development of these unit standards. The unit standards were endorsed by the stakeholders involved.

**Main changes**

- Performance criteria in unit standard 30879 were updated to reflect current safety requirements for personnel working on or around electric vehicles.
- Six new unit standards were developed.

**The last date for assessment of superseded versions of Category B unit standards is December 2020**

**Details of the unit standard – classification, title, level, and credits**

All changes are in **bold**.

<b>Key to review category</b>	
<b>A</b>	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
<b>B</b>	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
<b>C</b>	Major changes that necessitate the registration of a replacement standard with a new ID
<b>D</b>	Standard will expire and not be replaced

Engineering and Technology > Motor Industry > Automotive Electrical and Electronics

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Review Category</b>
30879	Demonstrate knowledge of hybrid electric and battery electric vehicle or machine systems and safety	4	5	B

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Review Category</b>
<b>31416</b>	<b>Depower and reinitialise electric vehicles</b>	<b>4</b>	<b>7</b>	<b>New</b>
<b>31417</b>	<b>Diagnose and repair traction motor system faults in electric vehicles</b>	<b>5</b>	<b>10</b>	<b>New</b>
<b>31418</b>	<b>Diagnose and replace an auxiliary motor in an electric vehicle</b>	<b>5</b>	<b>10</b>	<b>New</b>
<b>31419</b>	<b>Diagnose and repair safety interlock systems in electric vehicles</b>	<b>5</b>	<b>8</b>	<b>New</b>
<b>31420</b>	<b>Diagnose and repair cooling system faults in electric vehicles</b>	<b>5</b>	<b>10</b>	<b>New</b>
<b>31421</b>	<b>Diagnose and repair DC to DC system faults in electric vehicles</b>	<b>5</b>	<b>10</b>	<b>New</b>