

## Field      Engineering and Technology

### Registration of skill standards and review of *Motor Industry* unit standards

Subfield	Domain	ID
Motor Industry	Automotive Electrical and Electronics	31893, 31894, 31895
	Automotive Preventive Maintenance	31891, 31892, 31900
	Automotive Transmission Systems	31898, 31899
	Automotive Workshop Engineering	15429, 31896, 31897
	Engines	879, 24294, 31901

The Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council has completed the review of the unit standards listed above and the registration of the skill standards in the table below in bold.

**Date new versions published**

**March 2025**

**Planned review date**

**December 2029**

#### Summary

Hanga-Aro-Rau Manufacturing, Engineering, and Logistics Workforce Development Council met with stakeholders including employers and providers between July 2024 and September 2024 to review the New Zealand Certificate in Outdoor Power Equipment and 14 associated unit standards.

The consensus was that the units were working well in their current structure and that splitting the units by equipment was logical for learners. Industry and providers requested that theory standards and practical standards remained separate to suit their workplace needs.

New skill standards were developed with industry to meet their specific needs.

#### Main changes

- All unit standards have been replaced by skill standards. This change includes changing titles and making plain language changes to outcomes and criteria.
- Guidance information, document formatting and standard setting body information were updated across the suite of new skill standards.
- In some skill standards, assessment criteria were updated to improve assessment feasibility of small and large workplaces and to reflect changes to industry practice.
- In some standards, indicative content was changed to allow for a wider range of equipment.
- The replacement skill standards for unit standards 31895 and 31894 had the level changed from 3 to 4. Level 4 was considered more appropriate by industry as the standard required working independently with electricity.

**Category C unit standards will expire at the end of December 2027.**

## Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Domain	Automotive Electrical and Electronics	3	Standards	40473, 40474	4

## Detailed list of unit and skill standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
<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

ID	Title	Level	Credit	Review Category
31893	Describe remotely operated outdoor power equipment systems	4	4	C
<b>40479</b>	<b>Define remotely operated outdoor power equipment systems</b>	<b>4</b>	<b>4</b>	
31894	Test portable generators in the automotive industry	3	2	C
<b>40474</b>	<b>Test portable generators</b>	<b>4</b>	<b>2</b>	
31895	Describe testing of portable generators in the automotive industry	3	2	C
<b>40473</b>	<b>Determine the testing requirements of portable generators</b>	<b>4</b>	<b>2</b>	

### Engineering and Technology > Motor Industry > Automotive Preventive Maintenance

ID	Title	Level	Credit	Review Category
31891	Demonstrate knowledge of outdoor power equipment cutting systems, and describe their maintenance and fault diagnosis	4	3	C
<b>40469</b>	<b>Prepare to maintain and diagnose faults in outdoor power equipment cutting systems</b>	<b>4</b>	<b>3</b>	
31892	Maintain outdoor power equipment cutting systems, and diagnose and repair faults	4	4	C
<b>40470</b>	<b>Maintain, diagnose and repair faults in outdoor power equipment cutting systems</b>	<b>4</b>	<b>4</b>	
31900	Demonstrate knowledge of earth compacting machine systems, and describe their maintenance and fault diagnosis	4	4	C
<b>40480</b>	<b>Determine the maintenance requirements and fault diagnosis methods for earth compacting machine systems</b>	<b>4</b>	<b>4</b>	

Engineering and Technology > Motor Industry > Automotive Transmission Systems

ID	Title	Level	Credit	Review Category
31898	Diagnose and repair faults in power take-off clutches in the automotive industry	4	3	C
<b>40476</b>	<b>Diagnose faults and make repairs in power take-off clutches in the motor and related industries</b>	<b>4</b>	<b>3</b>	
31899	Demonstrate knowledge of power take-off clutches, and describe their fault diagnosis in the automotive industry	4	2	C
<b>40475</b>	<b>Prepare to operate and diagnose faults in power take-off clutches in the motor and related industries</b>	<b>4</b>	<b>2</b>	

Engineering and Technology > Motor Industry > Automotive Workshop Engineering

ID	Title	Level	Credit	Review Category
15429	Diagnose and repair outdoor power equipment faults in the automotive industry	4	20	C
<b>40482</b>	<b>Diagnose and perform complex repairs of outdoor power equipment in the motor and related industries</b>	<b>4</b>	<b>20</b>	
31896	Describe water blasters, low-pressure pumps, and diagnosing faults in the motor and related industries	4	4	C
<b>40471</b>	<b>Prepare to diagnose faults in water blasters and low-pressure transfer pumps used in motor and related industries</b>	<b>4</b>	<b>4</b>	
31897	Diagnose and repair faults in water blasters and low-pressure pumps in the motor and related industries	4	4	C
<b>40472</b>	<b>Diagnose and repair faults in water blasters and low-pressure transfer pumps in the motor and related industries</b>	<b>4</b>	<b>4</b>	

Engineering and Technology > Motor Industry > Engines

ID	Title	Level	Credit	Review Category
879	Test and tune two-stroke petrol engines and diagnose and repair faults	4	6	C
<b>40478</b>	<b>Test, tune and repair two-stroke petrol engines</b>	<b>4</b>	<b>6</b>	
24294	Demonstrate knowledge of two-stroke petrol engine lubrication, testing and tuning	4	3	C
<b>40477</b>	<b>Prepare to lubricate, test, and tune a two-stroke petrol engine</b>	<b>4</b>	<b>3</b>	
31901	Disassemble, inspect and reassemble an outdoor power equipment engine	4	10	C
<b>40481</b>	<b>Disassemble, inspect and reassemble an outdoor power engine</b>	<b>4</b>	<b>10</b>	