

Field **Engineering and Technology**

Review of *Motor Industry* unit standards

Subfield	Domain	ID
Motor Industry	Engine Repairs	11731
	Engines	11726-11729

MITO New Zealand Incorporated has completed the review of the unit standards listed above.

Date new versions published

February 2021

Planned review date

December 2025

Summary

MITO reviewed and developed the unit standards below at the request of industry to align with the New Zealand Certificate in Automotive Machining (Level 4) [Ref: 3522] and the New Zealand Certificate in Automotive Machining (Level 4) [Ref: 3523]. The review and development have resulted in fit-for-purpose assessment material being made available to industry that reflects current legislation and industry practice.

MITO's industry reference group endorsed the unit standards review and development. The working group included subject matter experts and representatives from industry and MITO. These unit standards were circulated in the working groups wider networks and all feedback was actioned where appropriate.

Main changes

- Titles, credit values, levels, outcomes, performance criteria, range statements, and guidance information were updated to reflect the needs of the motor industry.
- Units 11726 and 11731 were designated expiring without replacement as they were no longer reflective of the motor industry automotive machining sector needs.
- Credits for units 11727 and 11728 were decreased to more accurately reflect the required learning and assessment time.
- Unit 11729 was increased from Level 3 to Level 4 to better align to level descriptors.
- Eight new unit standards were developed to meet the needs of the motor industry automotive machining sector.

Category D unit standards will expire at the end of December 2023

The last date for assessment of superseded versions of Category B unit standards is December 2023

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
Subfield	Motor Industry	3	Standard	11729	4
Domain	Engines	3	Standard	11729	4

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

All changes are in **bold**.

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

Engineering and Technology > Motor Industry > Engine Repairs

ID	Title	Level	Credit	Review Category
11731	Analyse engine and components for mechanical failure and/or potential failure	5	6	D

Engineering and Technology > Motor Industry > Engines

ID	Title	Level	Credit	Review Category
11726	Demonstrate knowledge of engine design factors and machining practices	4	20	D
11727	Prepare to and machine engine cylinder heads Recondition engine cylinder heads	4	20 12	B
11728	Prepare to and machine engine short block assemblies Recondition engine cylinder blocks	4	25 10	B
11729	Inspect and machine engine piston and connecting rod assemblies	3 4	6	B
32319	Carry out an automotive engine cylinder head disassembly, inspection and reassembly	4	10	New
32320	Demonstrate knowledge of manually operated machines and tools for automotive machining	4	6	New
32321	Demonstrate knowledge of a mechanical run-in on an automotive engine	4	3	New
32322	Demonstrate knowledge of automotive cylinder head reconditioning practices	4	10	New
32323	Demonstrate knowledge of engine design factors	5	15	New
32324	Determine the cause of engine component failure and reflect on own diagnostic procedures	4	10	New
32325	Demonstrate knowledge of automotive engine block reconditioning practices	4	10	New
32326	Carry out an automotive engine block disassembly, inspection and reassembly	4	10	New