

FIELD ENGINEERING AND TECHNOLOGY**Review of *Motor Industry* unit standards**

Subfield	Domain	Id
Motor Industry	Automotive Transmission Systems	920
	Engine Repairs	11726
	Vehicle Braking Systems	8184

The NZ Motor Industry Training Organisation has completed the review of the unit standards listed above.

Date new versions published

June 2007

Planned review date

December 2012

Summary of review and consultation process

This review is part of a major review of the Motor Industry and Outdoor Fabric Product qualifications (QReview) being conducted by NZ Motor Industry Training Organisation (MITO). The QReview Steering Group endorsed these standards after major consultation was carried out covering a wide range of stakeholders through focus group meetings and followed by industry wide consultation. These standards will mainly form part of the new Motorsport qualifications but will also be used within other Automotive Mechanical and Electrical, and Automotive Specialist qualifications.

Main changes resulting from the review

- The titles of standards 920 and 11726 have been amended.
- Unit standard 8184 has been replaced by two new standards 23817 and 23818 to separate theory knowledge from practical outcomes.
- 24 new standards have been developed for inclusion in the new Motorsport qualifications.

Unit standard 8184 categorised as category C expires at the end of December 2011.

Impact on existing provider accreditations

Current Accreditation for			Accreditation extended to		
Nature of accreditation	Id	Level	Nature of accreditation	Id	Level
Standard	8184	3	Standard	23817, 23818	3

Impact on Accreditation and Moderation Action Plan (AMAP)

None.

Impact on existing qualifications

Qualifications that contain the reviewed standards or classifications are tabled below.

Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set The qualification lists a standard that has changes to level or credits The qualification lists a C or D category standard
Not materially affected	The qualification lists a standard that has a new title The qualification lists a standard that has a new classification

The following MITO qualifications are impacted by the outcome of this review, with the items that generated the affected status in bold. These qualifications will be updated as part of the current QReview.

Qualification title	Standard in the qualification
National Certificate in Motor Industry (Automotive Engineering) [Ref: 0019]	8184 , 920
National Certificate in Motor Industry (Brake Service Engineering) [Ref: 0096]	8184
National Certificate in Motor Industry (Automotive Machining) [Ref: 0371]	11726

Review Categories and changes to 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

Subfield Motor Industry
Domain Automotive Administration

Id	Title	Level	Credit	Review Category
23796	Meet employment requirements and work in a motorsport environment	2	4	New
23797	Comply with motorsport regulations and motorsport event safety requirements	3	3	New
23798	Collect and record information from a competition race vehicle's electronic data analysis system	3	2	New
23799	Carry out pit lane, pit paddock, and/or service park operations at a motorsport event	3	4	New
23800	Analyse information from a competition race vehicle's electronic data analysis system	5	4	New
23801	Determine and comply with competition race vehicle and support equipment transportation requirements	3	2	New
23802	Prepare to transport competition race vehicles and support equipment to and from a motorsport event	2	2	New

Domain Automotive Electrical and Electronics

Id	Title	Level	Credit	Review Category
23803	Demonstrate knowledge of competition race vehicle electronic data analysis systems	3	1	New
23804	Demonstrate knowledge of communication systems used in competition race vehicles and teams	3	3	New

Domain Automotive Fuel Systems and Exhaust

Id	Title	Level	Credit	Review Category
23805	Demonstrate knowledge of fuel systems and fuel system requirements for competition race vehicles	3	3	New
23806	Demonstrate knowledge of exhaust system tuning for performance and noise in competition race vehicles	5	4	New

Domain Automotive Preventive Maintenance

Id	Title	Level	Credit	Review Category
23807	Carry out competition race vehicle preparation and maintenance requirements at a motorsport event	4	6	New

Domain Automotive Transmission Systems

Id	Title	Level	Credit	Review Category
920	Describe the operation of a manual transmission used on cars and light commercial vehicles Describe the construction and operation of manual and semi-automatic transmissions used on light vehicles	3	4	B
23808	Demonstrate knowledge of transmission requirements for competition race vehicles	3	4	New

Domain Automotive Workshop Engineering

Id	Title	Level	Credit	Review Category
23809	Demonstrate knowledge of non-destructive testing of automotive components	3	2	New
23810	Carry out a non-destructive test to determine serviceability of automotive components	3	2	New

Domain Engine Repairs

Id	Title	Level	Credit	Review Category
11726	Describe engine design factors and machining practices Demonstrate knowledge of engine design factors and machining practices	4	20	B
23812	Demonstrate knowledge of competition race vehicle engine performance modification requirements and practices	5	7	New

Domain Tyres

Id	Title	Level	Credit	Review Category
23813	Demonstrate knowledge of competition tyres and their applications for motorsport events	3	4	New
23814	Select competition tyres for a specific motorsport event, and monitor tyre performance	4	2	New

Domain Vehicle Bodywork

Id	Title	Level	Credit	Review Category
23815	Demonstrate knowledge of body design features for competition race vehicles	4	5	New
23816	Demonstrate knowledge of body requirements and regulations for competition race vehicles	3	3	New

Domain Vehicle Braking Systems

Id	Title	Level	Credit	Review Category
8184	Explain the operation and servicing requirements of car and light commercial vehicle braking systems	3	6	C
23817	Demonstrate knowledge of braking principles and system component operation for light vehicles	3	5	
23818	Demonstrate knowledge of braking system fault diagnosis and repair requirements for light vehicles	3	3	
23819	Demonstrate knowledge of braking requirements for competition race vehicles	3	4	New
23820	Inspect and diagnose braking system faults, and repair braking systems on competition race vehicles	4	4	New

Domain Vehicle Steering and Suspension

Id	Title	Level	Credit	Review Category
23821	Demonstrate knowledge of fine tuning competition race vehicle steering and suspension systems to suit motorsport events	5	8	New
23822	Demonstrate knowledge of competition race vehicle steering and suspension systems to suit motorsport events	3	4	New