

Field Engineering and Technology

Review of *Motor Industry* unit standards

Subfield	Domain	ID
Motor Industry	Automotive Electrical and Electronics	21719, 24133
	Automotive Plastic Repair	23741
	Automotive Preventive Maintenance	21869
	Automotive Refinishing	24001, 24002, 24008, 24012, 24022, 24024
	Automotive Workshop Engineering	21715
	Collision Repair	5744, 23984, 23988, 23989, 29573, 29574
	Vehicle Bodywork	5468, 5740, 19637, 21694, 21695, 21697, 21699, 21701-21703, 21709, 21710, 21714, 22799, 22801, 23980, 23981, 23986, 23987, 23998, 24084, 24085, 29709

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

Date new versions published

December 2020

Planned review date

December 2025

Summary

MITO reviewed Motor Industry unit standards to meet the requirements of the New Zealand Certificate in Collision Repair and Automotive Refinishing (Level 3) [Ref: 3008], the New Zealand Certificate in Collision Repair (Non-Structural Repair) (Level 4) [Ref: 3011] and the New Zealand Certificate in Automotive Refinishing (Level 4) [Ref: 3009] and to ensure they are fit-for-purpose for the automotive industry sectors.

MITO was supported by the Collision Repair and Automotive Refinishing industry's working group including subject matter experts and MITO representatives. The unit standards were circulated to the working group's networks and organisations with consent to assess and a consultation period was held. Feedback received was actioned where appropriate.

Main changes

- Guidance information, outcomes, performance criteria and range statements of unit standards were updated to ensure relevance to industry practice and to reflect the intended outcomes.
- Titles and levels of some unit standards were amended to align with content changes.
- Credits were increased for unit standards 24001, 24002, 23980, and 23981 to reflect the time required for learning and assessment.

The last date for assessment of superseded versions of Category B unit standards is December 2023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	Standards	19637, 21695, 21697, 23741, 23980, 23984, 23986, 23988, 23989, 24001, 24002, 24084, 24133	4
Domain	Automotive Electrical and Electronics	3	Standard	24133	4
Domain	Automotive Preventive Maintenance	3	Standards	24001, 24002	4
Domain	Vehicle Bodywork	3	Standards	19637, 21695, 21697, 23980, 23986, 24084	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 > Automotive Electrical and Electronics

ID	Title	Level	Credit	Review Category
21719	Remove and replace motor vehicle lamps Remove and replace a lamp on a motor vehicle	2	3	B
24133	Identify, remove and replace a vehicle or machine wiring harness sub-assembly	3 4	2	B

Engineering and Technology > Motor Industry > Automotive Plastic Repair

ID	Title	Level	Credit	Review Category
23741	Demonstrate knowledge of plastics and plastic composite repairs used in the motor and related industries Demonstrate knowledge of plastics and plastic composite repairs used in the collision repair industry	3 4	2	B

Engineering and Technology > Motor Industry > Automotive Preventive Maintenance

ID	Title	Level	Credit	Review Category
21869	Remove and replace road wheels on a vehicle Remove and refit road wheels on a vehicle	2	1	B

Engineering and Technology > Motor Industry > Automotive Refinishing

ID	Title	Level	Credit	Review Category
24001	Demonstrate knowledge of masking materials and masking techniques for two pack painting Demonstrate knowledge of masking an area for two pack painting in the automotive refinishing industry	3 4	2 3	B
24002	Mask an area for two pack painting in the automotive refinishing industry	3 4	3 4	B
24008	Demonstrate knowledge of automotive spray guns, spraying and spray gun defects, and spray gun maintenance	3	2	B
24012	Demonstrate knowledge of paint defects in the automotive refinishing industry	4	2	B
24022	Use waterborne paint systems in the automotive refinishing industry	4	4	B
24024	Remove paint from vehicle panels	3	3	B

Engineering and Technology > Motor Industry > Automotive Workshop Engineering

ID	Title	Level	Credit	Review Category
21715	Select and use fastening systems in the motor industry Select and use fastening systems in the automotive industry	2	2	B

Engineering and Technology > Motor Industry > Collision Repair

ID	Title	Level	Credit	Review Category
5744	Demonstrate knowledge of vehicle body construction, and the effect of impact on vehicles	3	4	B
23984	Remove, repair, and replace damaged motor vehicle plastic bumpers Remove, repair, and replace a damaged motor vehicle plastic bumper	3 4	4	B
23988	Demonstrate knowledge of the resistance spot welding process used for vehicle repairs	3 4	2	B
23989	Use and maintain a resistance spot welding plant in the motor industry Use and maintain a resistance spot welding plant in the automotive industry	3 4	2	B
29573	Carry out pre-strip procedures in the collision repair industry	3	4	B
29574	Remove and replace motor body parts in the collision repair industry	3	15	B

Engineering and Technology > Motor Industry > Vehicle Bodywork

ID	Title	Level	Credit	Review Category
5468	Fit car and light commercial vehicle accessories Install car and light commercial vehicle accessories in the motor body industry	3	3	B
5740	Demonstrate knowledge of vehicle identification plates and specifications Demonstrate knowledge of motor vehicle identification plates and specifications	2	1	B

ID	Title	Level	Credit	Review Category
19637	Remove and repair perforated non-structural body panel corrosion damage Remove and repair perforated non-structural body panel corrosion damage in the collision repair industry	3 4	3	B
21694	Mask a repair for priming; and prime, fill, and sand a repair in the motor body industry Mask, prime, fill and sand a panel repair in the motor body industry	2	3	B
21695	Repair minor panel damage, shrink, and metal finish a repair in the collision repair industry Repair panel damage and shrink a panel in the collision repair industry	3 4	3	B
21697	Demonstrate knowledge of repairing minor panel damage and shrinking a repair in the collision repair industry Demonstrate knowledge of repairing panel damage and shrinking a panel in the collision repair industry	3 4	2	B
21699	Prepare a painted surface and prepare bare metal for painting in the motor industry Prepare a painted surface and bare metal for painting in the collision repair industry	3	3	B
21701	Demonstrate knowledge of exterior and interior motor body parts and trim in the motor industry Demonstrate knowledge of exterior and interior motor body parts in the automotive industry	2	2	B
21702	Demonstrate knowledge of preparing a vehicle body surface for painting, and preparing bare metal Demonstrate knowledge of preparing a vehicle body surface for painting, feather edging and preparing bare metal	3	2	B
21703	Demonstrate knowledge of masking, primers, and primer fillers in the collision repair industry Describe masking and primers in the collision repair industry	2	2	B
21709	Remove and replace damaged bolted-on motor body panels in the motor industry Remove and replace a bolted-on motor body panel in the automotive industry	3	3	B
21710	Fill and sand a repair in the motor industry Prepare, apply and sand body filler for a motor body panel repair	3	1	B
21714	Demonstrate knowledge of fastening systems used in the motor industry Demonstrate knowledge of fastening systems used in the automotive industry	2	2	B
22799	Demonstrate safety precautions on vehicles fitted with air bags and/or seatbelt pre-tensioners Demonstrate safety precautions on vehicles fitted with air bags and seatbelt pre-tensioners	3	1	B
22801	Demonstrate knowledge of adhesives and sealants used in the motor industry Demonstrate knowledge of adhesives and sealants used in the automotive industry	3	3	B

ID	Title	Level	Credit	Review Category
23980	Demonstrate knowledge of removing and replacing vehicle dash panels and adjacent fittings Demonstrate knowledge of removing and replacing vehicle dashboard panels and adjacent fittings	3 4	2 3	B
23981	Remove and replace vehicle dash panels and adjacent fittings Remove and replace a vehicle dashboard panel	4	4 5	B
23986	Demonstrate knowledge of glass reinforced plastic (GRP) and working with GRP repair kits for motor vehicles	3 4	2	B
23987	Repair a damaged motor vehicle panel using glass reinforced plastic (GRP)	4	2	B
23998	Demonstrate knowledge of vehicle body corrosion and anti-corrosion procedures in the motor industry Demonstrate knowledge of vehicle body corrosion and anti-corrosion procedures in the collision repair industry	3	4	B
24084	Demonstrate knowledge of automotive foams	3 4	2	B
24085	Demonstrate knowledge of automotive glass	3	2	B
29709	Demonstrate knowledge of bolted-on motor body panels and motor vehicle bumpers Describe bolted-on motor body panels and motor vehicle bumpers	3	3	B