VIRM: In-service certification ESC amendment 1 July 2015

17 June 2015

List of changes and preview package (WoF only)

This amendment covers changes relating to <u>Land Transport Rule</u>: <u>Light-vehicle brakes Amendment 2014</u> that come in to force on 1 July 2015.

From the 1 July 2015:

• an electronic stability control system fitted to a vehicle of class MA, MB, MC or NA must be maintained in good working order and not be removed.

This amendment only affects light vehicles - including some light passenger service vehicles.

Future changes

The amendment Rule also sets out the following dates from which used vehicles coming into New Zealand are required to have ESC:

- used class MC vehicles (four-wheel-drive SUVs and off-road vehicles) inspected at the border from 1 March
 2016
- used class MA vehicles (passenger cars) with engine capacity greater than 2 litres inspected at the border from 1 March 2018
- all other used class MA, MB and NA light passenger and goods vehicles inspected at the border from 1
 March 2020.

Similar to frontal impact and emissions requirements, when fully phased in, this provision will not apply to:

- an immigrant's vehicle, or
- a special interest vehicle, or
- a motorsport vehicle that is operated in accordance with the conditions of a valid low volume vehicle authority card issued for the vehicle in accordance with the Low Volume Vehicle Code, or
- a vehicle specified in paragraph (a)* of the definition of 'low volume vehicle' that was not originally fitted with an electronic stability control system and is certified in accordance with the Low Volume Vehicle Code, or
- a motor vehicle manufactured, or first registered outside of New Zealand, twenty years or more before the date of its first certification for entry into service in New Zealand.

As the changes come into force, VIRMs will be updated with the new requirements.

*A make and model of a vehicle of a class other than MD3, MD4, ME, NB, NC, TC and TD, that is:

(a) manufactured, assembled, or scratch-built in quantities of 500 or less in any one year, and where the construction of the vehicle may directly or indirectly affect compliance of the vehicle with any of the vehicle standards prescribed by New Zealand law.



LIST OF CHANGES

Note that links below go to the current VIRM pages.

To view the changes see the *Preview pages* following the table below.

SECTION	CHANGE DESCRIPTION	
Introduction		
7 Definitions and abbreviations	Electronic stability control definition added.	
General vehicles		
8-1 Service brake and park brake	New Reasons for rejection and Summary of legislation relating to ESC inspection requirements and identification.	
Technical bulletins (general)		
TB 11 Electronic stability control identification	How to identify if a vehicle has ESC and if it is working properly or faulty.	

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PREVIEW PAGES

Introduction

Definitions and abbreviations

Electronic stability control (ESC)

means a system that electronically regulates the stability of a motor vehicle and, as a minimum, has the following attributes:

- a) improves vehicle directional stability by at least having the ability to automatically control individually the braking torques of the left and right wheels on each axle, or an axle of each axle group, to induce a correcting yaw moment based on the evaluation of actual vehicle behaviour in comparison with a determination of vehicle behaviour demanded by the driver, and
- b) is computer-controlled, with the computer using a closed-loop algorithm to limit vehicle oversteer and to limit vehicle understeer based on the evaluation of actual vehicle behaviour in comparison with a determination of vehicle behaviour demanded by the driver, and
- c) has a means to determine directly the value of the vehicle's yaw rate and to estimate its side slip or side slip derivative with respect to time, and
- d) has a means to monitor driver steering inputs.

General vehicles

8-1 Service bake and park brake

Reasons for rejection Tables and images Summary of legislation

Electronic Stability Control (ESC) systems

- 30. Where the vehicle is fitted with an ESC system (if determined by the vehicle inspector see **Technical Bulletin 11**), the warning light indicates a fault.
- 31. Where the vehicle is fitted with an ESC system (if determined by the vehicle inspector see **Technical Bulletin 11**), the system has been removed from the vehicle.

Reasons for rejection Tables and images Summary of legislation

Electronic Stability Control (ESC) systems

- 12. An ESC system, including all components of that system fitted in a motor vehicle, must:
 - a) be maintained in good working order, and
 - b) not be removed from the vehicle.

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Technical bulletins (general)

11 Electronic stability control identification

11 Electronic stability control identification

Information

Identification of Electronic Stability Control (ESC)

The following evidence is acceptable proof that the vehicle is fitted with an ESC system:

- The presence and correct operation of appropriate ESC tell-tale indicators on the vehicle's dashboard
- A tell-tale indicator like the symbol below refers to an ESC system:



A tell-tale indicator on the vehicle's dashboard comprising the one of following acronyms:

Acronym	Meaning
ESC	Electronic stability control
DSC	Dynamic stability control
ESP	Electronic stability program
VSC	Vehicle stability control
VSA	Vehicle stability assist

 Other manufacturer-specific symbols or acronyms may also be acceptable if the certifier is satisfied that the lamp refers to an ESC system.

Identification of an ESC fault

An ESC fault is normally identified by the tell-tale indicator lamp not extinguishing at the conclusion of the self-check process initiated when the vehicle's ignition is switched on.

Note 1

Similar to frontal impact and emissions requirements, when fully phased in, this provision will not apply to:

- an immigrant's vehicle, or
- a special interest vehicle, or
- a motorsport vehicle that is operated in accordance with the conditions of a valid low volume vehicle authority card issued for the vehicle in accordance with the Low Volume Vehicle Code, or
- a low volume vehicle that was not originally fitted with an electronic stability control system and is certified in accordance with the Low Volume Vehicle Code, or
- a motor vehicle manufactured, or first registered outside of New Zealand, twenty years or more before the date
 of its first certification for entry into service in New Zealand.

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