



Ministry of **Transport**  
TE MANATŪ WAKA

**WELLINGTON, NEW ZEALAND**

**PURSUANT** to sections 152 and 155(a) and (b) of the Land Transport Act 1998, and after having had regard to the criteria specified in section 164(2) of that Act

**I, Michael Woodhouse**, Associate Minister of Transport,

**HEREBY** make the following ordinary Rule:

Land Transport Rule: Heavy-vehicle Brakes Amendment 2013

SIGNED AT Wellington

This *13<sup>th</sup>* day of *NOVEMBER* 2013

Michael Woodhouse

Associate Minister of Transport

**Land Transport Rule**  
**Heavy-vehicle Brakes Amendment 2013**  
**Rule 32015/3**

ISSN 1173-1559

Published by:

NZ Transport Agency  
Private Bag 6995  
Wellington 6141  
New Zealand

Email: [info@nzta.govt.nz](mailto:info@nzta.govt.nz)

Freephone: 0800 699 000

Printed and distributed by:



Wickliffe Solutions  
PO Box 932, Dunedin 9054  
New Zealand

**Land Transport Rule**  
**Heavy-vehicle Brakes Amendment 2013**  
**Rule 32015/3**



# Contents

Objective of the Rule		vii
Extent of consultation		viii
<b>Section 1</b>	<b>Application</b>	<b>1</b>
1.1	Title	1
1.2	Commencement	1
1.3	Scope of Rule	1
<b>Section 2</b>	<b>Amendments to Rule requirements</b>	<b>2</b>
2.1	Requirements for different types of brake	2
2.2	Reservoir capacity	2
<b>Section 3</b>	<b>Amendments to Schedules</b>	<b>2</b>
3.1	Amendments to <i>Schedule 5</i>	2
<b>Schedule</b>		<b>4</b>
	Figure 1: New <i>Figure 1, Schedule 5</i>	4
	Figure 2: New <i>Figure 2, Schedule 5</i>	5



## Objective of the Rule

**Land Transport Rule: Heavy-vehicle Brakes Amendment 2013** (the amendment Rule) amends *Land Transport Rule: Heavy-vehicle Brakes 2006* (the Heavy-vehicle Brakes Rule or the Rule). The Heavy-vehicle Brakes Rule specifies requirements to ensure that heavy vehicles and heavy-vehicle combinations can brake safely, with balanced brake performance, at any road-legal load condition.

The objective of the amendment Rule is to make changes to the Heavy-vehicle Brakes Rule that:

- allow heavy trailers to be fitted with a parking brake that is operated from the trailer;
- allow vehicles complying with Australian Design Rule 35 *Commercial Vehicle Brake Systems* to meet the reservoir capacity test without modifying their braking systems;
- amend the relevant provisions and the diagram in *Figure 1 of Schedule 5* so that they accurately reflect the range within which short wheelbase vehicles can comply with the brake force distribution performance requirements of the Rule;
- provide an exception to the requirement in *4.1.2(a)* and *4.2.3 of Schedule 5* for vehicles fitted with an electronically controlled braking system;
- correct an omission in *Figure 2 of Schedule 5* which means that non-towing semi-trailers cannot comply with braking ratio requirements in the Rule;
- remove requirements that will no longer be required as a result of the changes proposed to *Schedule 5* and make editorial corrections of errors in *Schedule 5*;
- remove the requirement to obtain written permission from the NZ Transport Agency for air-braked powered vehicles towing semi-trailers to exceed the prescribed braking ratio; and

clarify the requirements for these vehicles depending on whether or not they are fitted with an anti-lock braking system.

## Extent of consultation

For the purposes of consultation, amendments proposed to the Heavy-vehicle Brakes Rule and eight other Land Transport Rules were combined into a single Rule, *Land Transport Rule: Omnibus Amendment 2013* (the Omnibus Amendment Rule). Following consultation, the provisions in the Omnibus Amendment Rule were split into nine separate amendment Rules, including this Rule.

The NZ Transport Agency sent details of the amendment proposals by letter or email to approximately 2400 groups and individuals who had registered an interest in the Rules to be amended. The Omnibus Amendment Rule was made available through the NZ Transport Agency's Contact Centre and, together with Questions and Answers, was also made available on the NZ Transport Agency's website. The availability of the amendment proposals for comment was publicised in the daily newspapers in Auckland, Hamilton, Wellington, Christchurch and Dunedin and in the *New Zealand Gazette*.

The NZ Transport Agency received 22 submissions on the Omnibus Amendment Rule, of which nine commented on the proposed amendments to the Heavy-vehicle Brakes Rule.

The submissions received were taken into account in finalising this amendment Rule following which it was submitted to the Associate Minister of Transport for signing.



## **Section 1    Application**

---

### **1.1**

#### **Title**

This Rule is *Land Transport Rule: Heavy-vehicle Brakes Amendment 2013*.

### **1.2**

#### **Commencement**

This Rule comes into force on 1 January 2014.

### **1.3**

#### **Scope of Rule**

This Rule amends *Land Transport Rule: Heavy-vehicle Brakes 2006*.

## Section 2 Amendments to Rule requirements

---

### 2.1 Requirements for different types of brake

After *clause 2.3(9A)*, insert:

“2.3(9B) Despite 2.3(9), a Class TC or TD vehicle may have a parking brake that is operated from the vehicle if the vehicle also has a device that acts as a parking brake by applying the service brake indefinitely and that will apply the parking brake automatically if that service brake application fails.”.

### 2.2 Reservoir capacity

In *clause 3.6(1A)*, replace “or (b)” with “, (b) or (e)”.

## Section 3 Amendments to Schedules

---

### 3.1 Amendments to *Schedule 5*

3.1(1) In *Schedule 5, clause 4.1.1*, replace “0.8 g” with “0.6 g”.

3.1(2) In *Schedule 5, clause 4.1.2(a)*, after “front axle” insert “except for a vehicle that is fitted with an electronically controlled braking system (EBS) that meets the definition of EBS in an approved vehicle standard in 2.5(2)(a) or (b) of this Rule”.

3.1(3) In *Schedule 5, clause 4.2.1*, replace “0.8 g” with “0.6 g”.

3.1(4) In *Schedule 5, clause 4.2.3*, replace “and between 0.15 g and 0.3 g braking ratio (z),” with:

“(except for a vehicle that is fitted with an electronically controlled braking system (EBS) that meets the definition of EBS in an approved vehicle standard in 2.5(2)(a) or (b) of this Rule), when the braking ratio (z) is between 0.15 g and 0.3 g.”.

- 3.1(5) In *Schedule 5, clause 7.2*, replace “if written permission has been obtained from the Agency for the vehicle” with “for tractor units fitted with ABS for the laden condition only and for tractor units without ABS for the unladen and laden conditions”.
- 3.1(6) In *Schedule 5, clause 8.1*, delete “in 4, for the adhesion utilisation and the requirements”.
- 3.1(7) In *Schedule 5*, delete *clause 8.3*.
- 3.1(8) In *Schedule 5, clause 8.4*, delete “and *Figure 3*”.
- 3.1(9) In *Schedule 5*, replace *clause 9.1* with:
- “9.1 For a vehicle in 9, the following relationship must hold, when the control line pressure ( $p_m$ ) measured in kPa at the Duomatic or other type of coupling connecting the air brake of the towing and towed vehicle is:
- “(a) if  $55 \text{ kPa} \leq p_m \leq 750 \text{ kPa}$ , then  $z \leq 0.044 + (p_m - 55) \times 0.656/695$ ; and
- “(b) if  $80 \text{ kPa} \leq p_m \leq 450 \text{ kPa}$ , then  $(p_m - 80) \times 0.35/370 \leq z$ ; and
- “(c) if  $450 \text{ kPa} \leq p_m \leq 750 \text{ kPa}$ , then  $0.35 + (p_m - 450) \times 0.225/300 \leq z$ .”.
- 3.1(10) In *Schedule 5*, replace *clause 9.3* with:
- “9.3 Compliance with the requirements in 9 may be shown by plotting the calculated braking ratio as a function of control-line pressure and the permissible limits specified in 9.1.
- “(See also *Figure 2*)”.
- 3.1(11) In *Schedule 5*, delete *clause 9.4*.
- 3.1(12) In *Schedule 5*, replace the diagram in *Figure 1* with the diagram in *Figure 1* in the *Schedule* to this Rule.
- 3.1(13) In *Schedule 5*, replace the diagram in *Figure 2* with the diagram in *Figure 2* in the *Schedule* to this Rule.
- 3.1(14) In *Schedule 5, Figure 3*, delete “(*Special case, requires approval from the Agency*)”.

## Schedule

Figure 1: New *Figure 1, Schedule 5*

[Reference 3.1(12)]

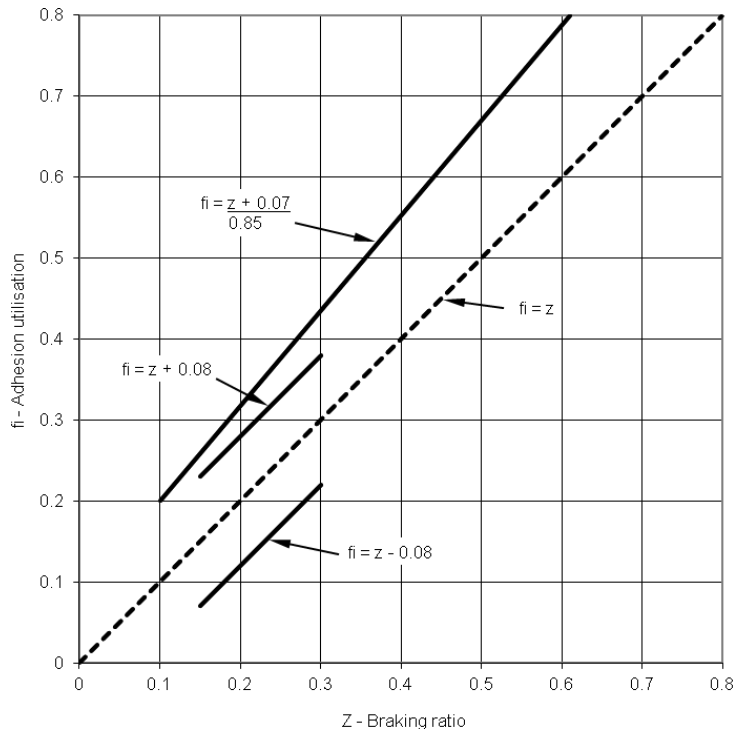


Figure 2: New *Figure 2, Schedule 5*

[Reference 3.1(13)]

