

# VIRM: IN-SERVICE CERTIFICATION AMENDMENT (WOF AND COF)

April 2021 amendment

MARCH 2021

## LIST OF CHANGES

Section	Change description
<b>Introduction</b>	
7 Definitions and abbreviations	LVV plate definition updated to include electronic data plates.
8 Sample certification documents	Sample image of the new electronic LVV plate
<b>General vehicles</b>	
3-1 Structure	Detail added about when a vehicle with an added snorkel should be LVV certified or not.
4-1 Headlamps	Rfr 13e and Note 8 updated. Vehicles should be failed if they have a headlamp HID or LED conversion kit. – They bring the headlamp out of standards compliance by producing poor beam patterns and light that is far too bright to be safe.
4-2 Front and rear fog lamps	Figure 4-2-1 updated to more clearly show the beam pattern and dip.
7-1 Seats and seat anchorages	Content added to note 6 about LVV plate info not matching when seats are removed.
10-1 Tyres and wheels	Note 6 updated to explain that the vehicle inspector should check with the tyre manufacturer for intended use if they are unsure whether a tyre is a winter tyre or not.
<b>Heavy vehicles</b>	
4-1 Headlamps	See general vehicles.
4-2 Front and rear fog lamps	See general vehicles.
8-1 Service brake, parking brake and heavy vehicle emergency brake	<ul style="list-style-type: none"> <li>Wheelbase modifications completed prior to 1/04/2021 that do not have HVEK certification for a wheelbase change may be passed for CoF but must have HVEK certification completed before the next CoF. Notes must be recorded showing the completion of this inspection and actions needed to be taken before next CoF.</li> <li>Any vehicles presented for inspection 1 year after 01/04/2022 will not pass for CoF without the correct certification.</li> <li>All vehicles presented for first time entry compliance must meet the requirements for HVEK certification immediately.</li> </ul>
10-3 Mudguards	<ul style="list-style-type: none"> <li>Two new reasons for rejection introduced with regard to mudguards on logging trucks to align with the Land Transport Rule: Vehicle Equipment 2004.</li> <li>New image added to assist vehicle inspectors with mudguard requirements</li> </ul>
<b>Light PSVs</b>	

4-1 Headlamps	See general vehicles.
4-2 Front and rear fog lamps	See general vehicles.
7-1 Seats and seat anchorages	See general vehicles.
10-1 Tyres and wheels	See general vehicles.
<b>Heavy PSVs</b>	
4-1 Headlamps	See general vehicles.
4-2 Front and rear fog lamps	See general vehicles.
10-3 Mudguards	See heavy vehicles.
<b>Motorcycles</b>	
4-1 Headlamps	Content modified to align with general vehicles in regard to HID and LED requirements.
4-2 Front and rear fog lamps	Figure 4-2-1 updated to more clearly show the beam pattern and dip.
8-1 Brakes	LVV certification is required on motorcycles that are allowed to have ABS disabled.
<b>Heavy trailers</b>	
3-1 Structure	See heavy vehicle rust heave changes.
5-1 Service brake, parking brake, emergency brake and breakaway brake	See heavy vehicles
7-3 Mudguards	New image added to assist vehicle inspectors with mudguard requirements (same image as heavy vehicles 10-3)
<b>Forklifts</b>	
4-1 Headlamps	See motorcycles
4-2 Front and rear fog lamps	Figure 4-2-1 updated to more clearly show the beam pattern and dip.
<b>Tractors</b>	
4-1 Headlamps	See motorcycles
<b>Unclassified vehicles</b>	
4-1 Headlamps	See motorcycles
4-2 Front and rear fog lamps	Figure 4-2-1 updated to more clearly show the beam pattern and dip.
<b>Technical bulletins (general)</b>	
13 Acceptable overseas proof of modification	2018/858 is an acceptable code that has been introduced in Europe. It is used in the same way as the 2007/46 code.
<b>Technical bulletins (CoF)</b>	
1 Expiry dates recorded on ID label/plate and HVS certificate (LT400)	<ul style="list-style-type: none"> <li>1a updated to 'towing connections' to provide consistency across the VIRM</li> <li>1b regarding Towbar rated over 200kg deleted as no longer relevant (recertification should have occurred).</li> </ul>
2 OEM wheel RIM options	Email address added to request Waka Kotahi to add new content to, or update, the page.

# PREVIEW PAGES

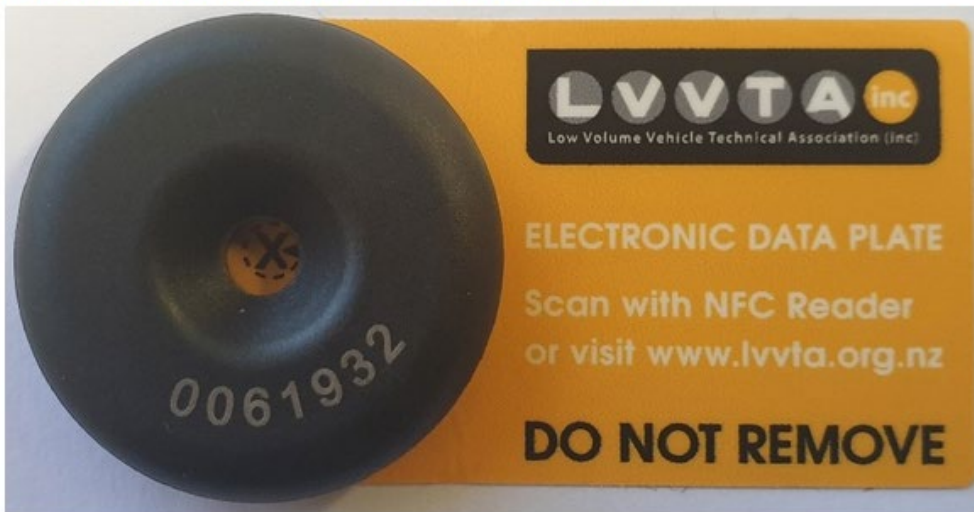
## Introduction

### 7 Definitions and abbreviations

<b>Low volume vehicle plate, label or authority card</b>	means a plate, <b>electronic data plate or disc</b> , label, or authority card issued in accordance with the Low Volume Vehicle Code.  For more information see <a href="https://lookup.lvvtta.org.nz">https://lookup.lvvtta.org.nz</a> and <b>Inspection news issue 5</b>
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### 8 Sample certification documents

**Figure 8-1-7. Sample LVVTA electronic data plate**



## General vehicles

### 3-1 Structure

Reasons for rejection	<b>Tables and images</b>	Summary of legislation
<b>Table 3-1-1. Modifications that do not require LVV certification</b>		
<b>Fitting of or modification to:</b>	<b>LVV certification is not required provided that:</b>	
<b>Snorkels</b>	<ul style="list-style-type: none"> <li>the snorkel is fitted only to the outer skin of the A-pillar (not into the central structure), and</li> <li>the fixings are of an appropriate size, and</li> <li>the fixings are sealed to prevent water ingress into the A-pillar, and</li> <li>appropriate rust treatment is applied to prevent corrosion.</li> </ul> <p><b>Note:</b> it is recommended that snorkels are fitted with high strength adhesives rather than screws.</p>	

## 4-1 Headlamps

Reasons for rejection

Tables and images

Summary of legislation

### Performance

13. When switched on, a headlamp emits a light that is:

- a) not substantially white or amber, or
- b) not approximately equal in colour or intensity from the other lamp in a pair, or
- c) not steady, or
- d) not bright enough to illuminate the road ahead, eg due to modification, deterioration or an incorrect light source, or
- e) too bright, eg due to the fitment of an HID or LED conversion kit (**Note 8**) or other incorrect light source (see also reason for rejection 19 below).

### Note 8

A high-intensity discharge (HID or Xenon HID) or LED conversion kit consists of an HID or LED bulb which fits into the original headlamp unit in place of the original bulb with no change to the headlamp lens, reflector or housing.

It is illegal to fit an HID or LED conversion kit to a vehicle as it brings the headlamp out of standards compliance by producing poor beam patterns and light that is often far too bright to be safe. The bulbs can also produce light that is noticeably blue and not the required substantially white or amber colour. Vehicle and headlamp manufacturers do not permit this modification, and these kits cannot be LVV certified.

It is permitted to replace a complete halogen headlamp unit with a complete HID or LED headlamp unit. If the vehicle is required to meet an approved safety standard for headlamps, only approved headlamps can be retrofitted (see **Figure 4-1-1**).

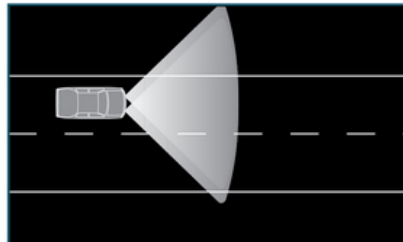
## 4-2 Front and rear fog lamps

Reasons for rejection

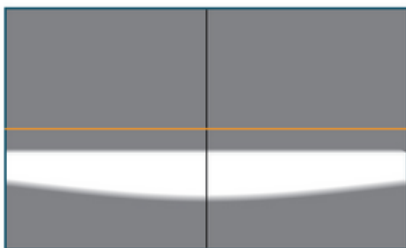
Tables and images

Summary of legislation

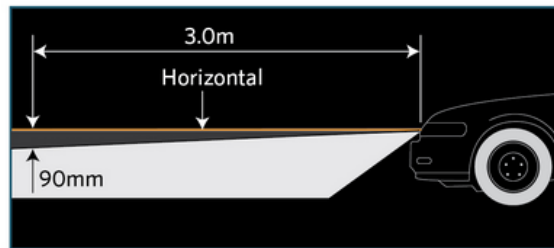
Figure 4-2-1. Front fog lamp characteristics



(a) Pattern on the road



(b) Pattern on light board



(c) Beam dip angle

## 7-1 Seats and seat anchorages

### Note 6

- Where a manufacturer fitted or LVV certified seat has been removed, a seatbelt is not required for that position, so any remaining seatbelt or seatbelt anchorage components are not required to be inspected.
- Where an LVV certified seat has been temporarily removed, meaning that the information on the LVV plate differs from the vehicle, this is not on its own a reason for rejection.
- Where seatbelt or seatbelt anchorage components remain fitted, and the vehicle is such that the removed seats can be readily re-fitted and used with the seatbelts, the vehicle inspector must:
  - identify which seats were missing when the vehicle was presented for inspection, and
  - advise the vehicle operator that the remaining seatbelt components have not been checked, and that if the missing seats are re-fitted at a later stage, it is the vehicle operators' responsibility to ensure that these seats and seatbelts are compliant prior to using them.

If the inspector chooses to inspect any remaining seatbelt components, then they should identify that to the vehicle operator. Any defects should be noted on the checksheet, but must not be failed. The same information as noted above must be recorded on the checksheet to make it clear that the responsibility lies with the vehicle operator if seats are re-fitted.

## 10-1 Tyres and wheels

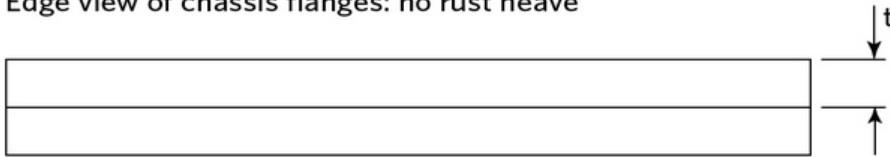
### Note 6

If a vehicle inspector has concerns about any tyre/wheel combination, they should request/ take into account relevant information provided by the tyre manufacturer (eg intended use of the tyre).

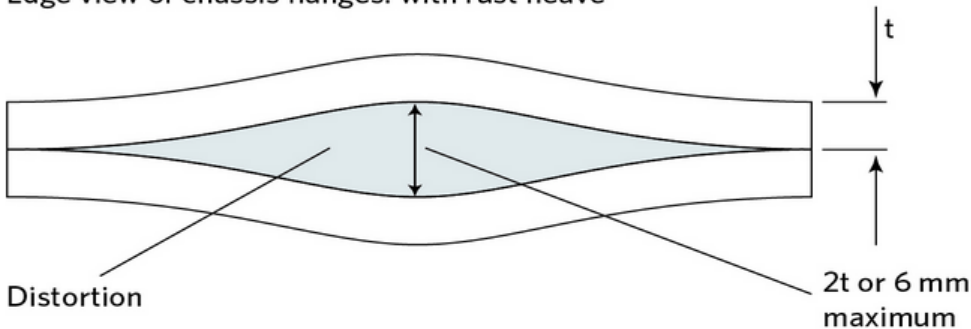
## Heavy vehicles

**Figure 3-1-3. Rust heave limits**

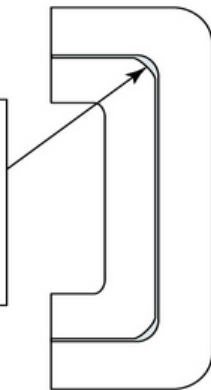
Edge view of chassis flanges: no rust heave



Edge view of chassis flanges: with rust heave



Rusting takes place between chassis members, and corrosion products force flanges apart between rivets



Apply similar criteria (twice material thickness or 6 mm maximum) for corrosion in other parts of structural members

**Note:** where the flanges are of different thickness,  $t$  shall be taken as the minimum of these.

Rust heave beyond the limits described above is acceptable only if an HVS certifier with the HVEC category has confirmed in writing that at the time of inspection the identified chassis rust heave on the vehicle remains within safe tolerance of the vehicle's state of manufacture. Confirmation from the HVS certifier should be kept with the checksheet. The identity of the HVS certifier must be recorded in the Landata GNOTE page. This assessment is only valid for that specific CoF inspection.

Regardless of any expiry date, an inspector may refer the vehicle to an HVS certifier if he/she suspects that the safety of the vehicle is compromised, eg due to excessive corrosion or chassis cracking. If the chassis is repaired, an LT400 is required.

### 4-1 Headlamps

See general vehicles

### 4-2 Front and rear fog lamps

See general vehicles

## 8-1 Service brake, parking brake and heavy vehicle emergency brake

Reasons for rejection	Tables and images	Summary of legislation
<p><b>Modification and certification.</b></p> <p>51. A vehicle in <b>Table 8-1-6</b>:</p> <ul style="list-style-type: none"><li>a) has not been certified as required by that table, or</li><li>b) has been modified so that recertification is required.</li></ul> <p>52. A modification that affects the brake system has not been inspected and certified by a heavy vehicle specialist certifier, unless the vehicle:</p> <ul style="list-style-type: none"><li>a) is excepted from the requirement for heavy vehicle specialist certification (<b>Table 8-1-7</b>), and</li><li>b) has been inspected in accordance with the requirements in this manual, including those for equipment, condition and performance.</li></ul> <ul style="list-style-type: none"><li>• Wheelbase modifications completed prior to 1/04/2021 that do not have HVEK certification for a wheelbase change may be passed for CoF but must have HVEK certification completed before the next CoF. Notes must be recorded showing the completion of this inspection and actions needed to be taken before next CoF.</li><li>• Any vehicles presented for inspection after 01/05/2022 will not pass for CoF without the correct certification.</li><li>• All vehicles presented for first time entry compliance must meet the requirements for HVEK certification immediately.</li></ul>		

**Table 8-1-6. Heavy vehicle brakes: certification requirements for class NB and NC vehicles**

<sup>3</sup>**Modified** in this case means to change the vehicle or its braking system from its original state by altering, substituting, adding or removing any structure, system, component or equipment that may affect the brakes and includes, but is not limited to:

- altering a vehicle's wheelbase
- Wheelbase modifications completed prior to 1/04/2021 that do not have HVEK certification for a wheelbase change may be passed for CoF but must have HVEK certification completed before the next CoF. Notes must be recorded showing the completion of this inspection and actions needed to be taken before next CoF.
- Any vehicles presented for inspection after 01/05/2022 will not pass for CoF without the correct certification.
- All vehicles presented for first time entry compliance must meet the requirements for HVEK certification immediately.
- fitting a tow connection to tow a heavy vehicle
- changing the vehicles configuration (eg rigid to tractor, adding an axle or changing GVM).

## 10-3 Mudguards

Reasons for rejection	Tables and images	Summary of legislation
<p><b>Mandatory equipment</b></p> <p>4. A truck used for transporting round timber does not have full mudguards over steer axles (<b>Figure 10-3-6</b>).</p> <p>5. A truck used for transporting round timber does not have at least quarter guards fitted to the front and rear tyres of the drive axle set (<b>Figure 10-3-6</b>).</p>		

## Figure 10-3-6. Heavy vehicle mudguard requirements (Note 1)

### All trucks and trailers

Where there is no body, deck or other fitting that can serve as a mudguard then a mudguard that meets the definition must be fitted where it is reasonable and practical to fit one.

**Definition:** Mudguard means a fitting, inclusive of any portion of the vehicle and of any mudflaps attached, that serves to intercept material thrown up by a wheel more or less in the plane of the wheel.



### Logging truck exceptions

- Full mudguards over steer axles and where full mudguards cannot be fitted to the drive axles, partial mudguards may be fitted.
- If the drive axle is twin tyred the mudguard must provide continuous protection from a horizontal line at the top of the tyre to a line rising rearward with a slope of 1:3 from the tyre's contact point with the road, and
- the distance between the tyre and the mudguard must not be more than twice the distance from the centre of the wheel to the road.



### Logging trailer exceptions

At least partial mudguards mounted behind the rearmost axle that meet the following requirements:

- the mudguard must provide continuous protection from a horizontal line at the top of the tyre to a line rising rearward with a slope of 1 in 3 from the tyre's contact point on the road, and
- the distance between the tyre and the mudguard must not be more than twice the distance from the centre of the wheel to the road.



## Light PSVs

### 4-1 Headlamps

See general vehicles

### 4-2 Front and rear fog lamps

See general vehicles

### 7-1 Seats and seat anchorages

See general vehicles

### 10-1 Tyres and wheels

See general vehicles



## Heavy PSVs

### 4-1 Headlamps

See general vehicles

### 4-2 Front and rear fog lamps

See general vehicles

### 10-3 Mudguards

See heavy vehicles

## Motorcycles

### 4-1 Headlamps

Reasons for rejection

Tables and images

Summary of legislation

#### Performance

10. When switched on, a headlamp emits light that is:

e) too bright, eg due to the fitment of an HID or LED conversion kit (**Note 7**) or other incorrect light source (see also reason for rejection 16 below), or

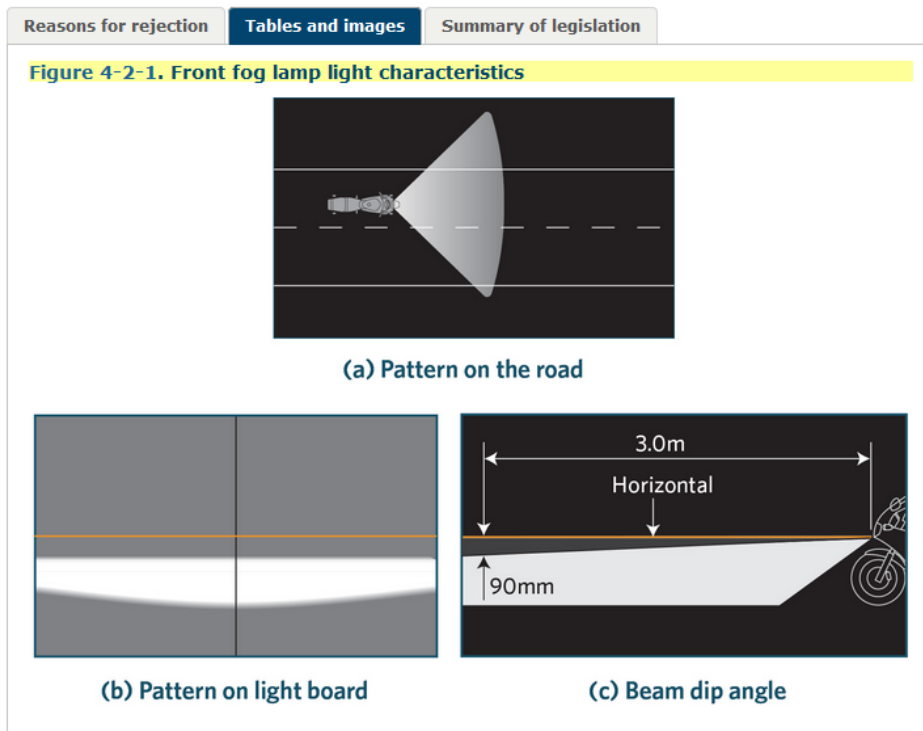
#### Note 7

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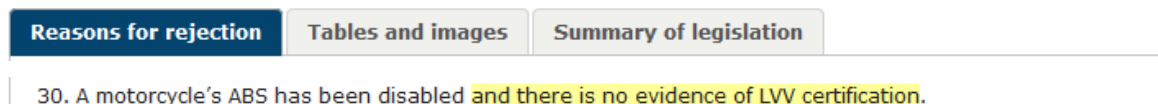
It is illegal to fit an HID or LED conversion kit to a vehicle as it brings the headlamp out of standards compliance by producing poor beam patterns and light that is often far too bright to be safe. The bulbs can also produce light that is noticeably blue and not the required substantially white or amber colour. Vehicle and headlamp manufacturers do not permit this modification, and these kits cannot be LVV certified.

It is permitted to replace a complete halogen headlamp unit with a complete HID or LED headlamp unit. If the vehicle is required to meet an approved safety standard for headlamps, only approved headlamps can be retrofitted.

## 4-2 Front and rear fog lamps



## 8-1 Brakes



## Heavy trailers

### 3-1 Structure

See heavy vehicles

### 5-1 Service brake, parking brake, emergency brake and breakaway brake

See heavy vehicles

### 7-3 Mudguards

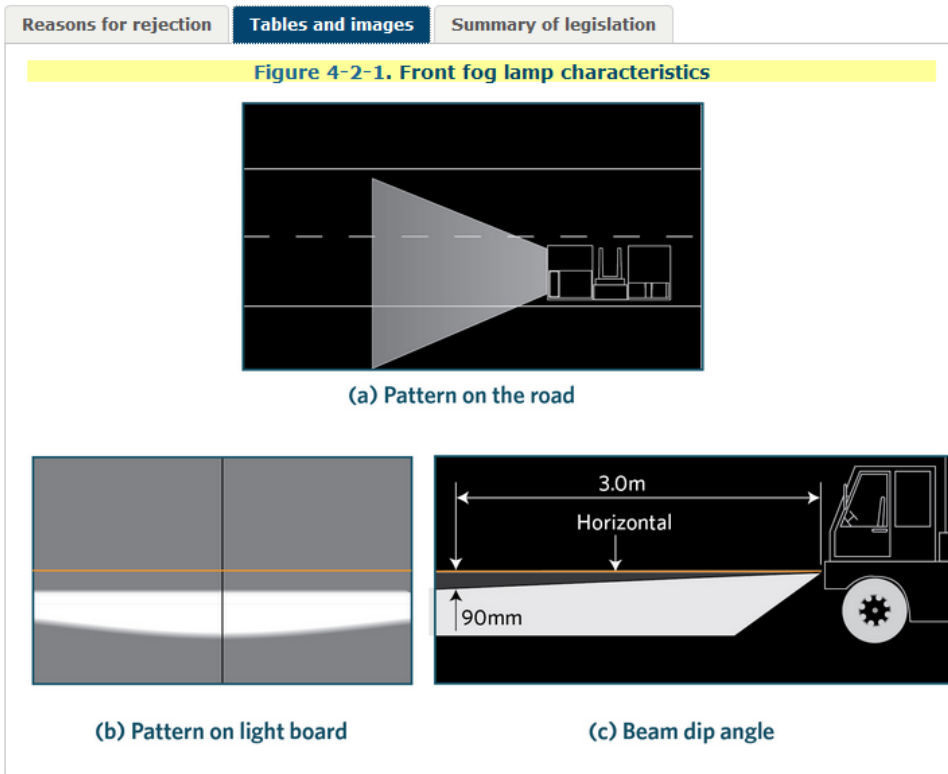
See heavy vehicles

## Forklifts

### 4-1 Headlamps

See motorcycles

## 4-2 Front and rear fog lamps



## Tractors

### 4-1 Headlamps

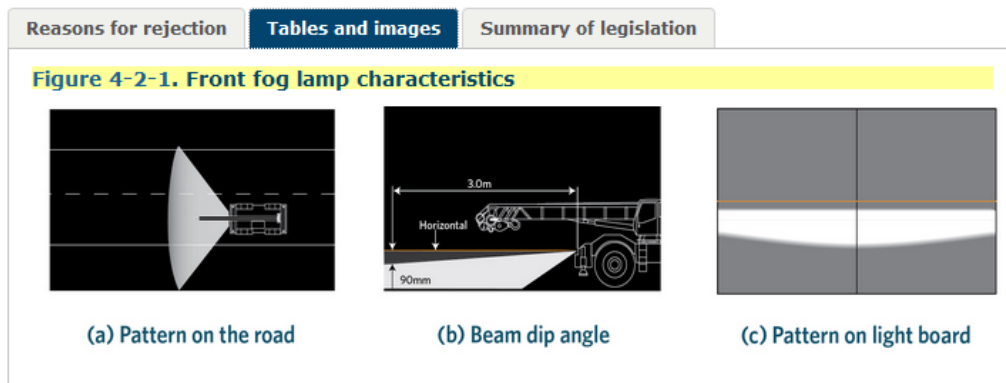
See motorcycles

## Unclassified vehicles

### 4-1 Headlamps

See motorcycles

## 4-2 Front and rear fog lamps



## Technical bulletins (general)

### 13 Acceptable overseas proof of modification

Acceptable overseas certifications	Specific evidence
<p><b>Europe</b> ECWVTA: European Community Whole Vehicle Type Approval</p>	<ul style="list-style-type: none"><li>• <b>2018/585 OR 2007/46 OR 2001/116 (Note 1)</b> in the Type Approval Number (eg <b>e11*2018/858*0851*01</b>, e11*2007/46*0851*01 or e1*2001/116*0391*11 like in <b>Figure 13-1-2</b>)</li><li>• 'Stage 2' or 'Stage 3' must also be on the label immediately below the type approval number. <b>Note:</b> The word 'Stage' may also be written in a different language, most commonly French (Etape) or German (Stufe). (eg 'Stage 2' or 'Stufe 2' like in <b>Figure 13-1-3</b>)</li></ul> <p><b>Note 1</b> A motorhome may have final stage approval to 2001/116/EC provided it was approved to 2007/46/EC or 2018/858/EC at an earlier approval stage (ie there is a base or second stage approval label listing 2007/46/EC in addition to the 2001/116/EC final stage label).</p>

## Technical bulletins (CoF)

### 1 Expiry dates recorded on ID label/plate and HVS certificate (LT400)

#### Inspection

1. CoF inspectors are not to enter any expiry date on LANDATA unless the LT400 was issued for:
  - a) a **towing connection**, first certified to NZS5446 after 1 August 1991, or
  - b) a bolster attachment as per the Bolster Attachment Code.

### 2 OEM wheel RIM options

- Approved distributors wishing to update this bulletin should email their information to [vehicles@nzta.govt.nz](mailto:vehicles@nzta.govt.nz)