

Correct as at 6th June 2026. It may be superseded at any time.

Extract taken from: In-service certification (WoF and CoF) > Tractors > Lighting

## 4 Lighting

Page amended 1 June 2013 (see [amendment details](#)).

### 4-1 Headlamps

#### Reasons for rejection

##### Mandatory and permitted equipment

1. A vehicle is not fitted with one pair of dipped-beam headlamps.
2. A vehicle is fitted with more than:
  - a) one pair of dipped-beam headlamps, or
  - b) two pairs of main-beam headlamps.
3. A vehicle is fitted with a headlamp that is not in a pair.
4. A retrofitted pair of headlamps is not fitted:
  - a) symmetrically, or
  - b) as far towards each side of the vehicle as is practicable.
5. A vehicle is fitted with a dipped-beam headlamp where the maximum intensity of the beam is projected to the right.

##### Condition

6. A lamp is insecure.
7. A lens is missing or has a hole, crack or other damage that allows moisture or dirt to enter.
8. A lens or reflector is damaged or has deteriorated so that light output is reduced.
9. A main-beam headlamp warning device is obscured from the driver's vision.
10. A mandatory lamp is obscured or contains dirt or moisture in the form of large droplets, runs or puddles.

##### Performance

11. 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 to 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 6) or other incorrect light source.

12. When the dipped-beam headlamps are switched on (with wheels pointing straight ahead):

- a) a lamp does not operate, or
- b) more than two lamps operate on dipped beam, or
- c) the light beam produces an incorrect beam pattern, is not focused, or is reduced or altered, or
- d) the centreline of the light beam is too far to the left or slopes down too far so that the headlamp is no longer capable of illuminating the road at least 50 m ahead (Figure 4-1-1), or
- e) the centreline of the light beam:
  - i. projects to the right of the vehicle's centreline, or
  - ii. does not dip at an angle specified in Table 4-1-1.

13. When the main-beam headlamps are switched on (with wheels pointing straight ahead):

- a) a lamp does not operate, or
- b) more than four lamps operate on main beam, or
- c) the centreline of the light beam projects to the right of the vehicle's centreline or up from the horizontal, or
- d) the lamps are not capable of being switched to dipped beam or turned off from the driver's seating position, or
- e) a main-beam headlamp warning device does not indicate to the driver that the main-beam headlamps are switched on.

#### **Note 1**

If the dipped-beam headlamps are able to be adjusted from the driver's seating position, the alignment must be checked with the adjustment at its highest position.

#### **Note 2**

If the vehicle is fitted with self-levelling suspension, the alignment must be checked with the suspension at its normal level.

#### **Note 3 Definition**

**Headlamp** means a lamp designed to illuminate the road ahead of a vehicle, and that is:

- a) a dipped-beam headlamp (single lamp), or
- b) a main-beam (high-beam) headlamp (single lamp), and includes a driving lamp, or
- c) a combination of a dipped-beam headlamp and a main-beam headlamp (dual-lamp unit).

#### **Note 4**

If a headlamp is fitted with a readily removable cover, other than a clear protective cover, this must be removed for inspection of the headlamp.

**Note 5**

A vehicle originally manufactured with a headlamp arrangement that differs from what is required or permitted in this section may retain the original headlamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

**Note 6**

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.

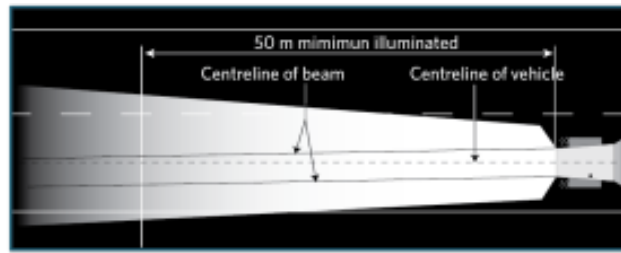
**Table 4-1-1. Allowable dipped-beam headlamp alignment**

	Headlamp type	Distance from ground to centre of light source	Dip rate of beam centre: lower and upper limits		
			Percent (%)	mm/3m	Degrees (°)
EITHER	Any headlamp dipped beam	N/A	As specified by the vehicle or headlamp manufacturer		
OR	Headlamp with symmetric dipped-beam pattern	N/A	3.0–3.5	90–105	1.7–2.0
OR	Headlamp with asymmetric dipped-beam pattern and distance from ground to centre of light source	less than 0.8m	1.0–1.5	30–45	0.57–0.85
		0.8–1.2m	1.0–2.0	30–60	0.57–1.15
		more than 1.2m	2.0–2.5	60–75	1.15–1.43

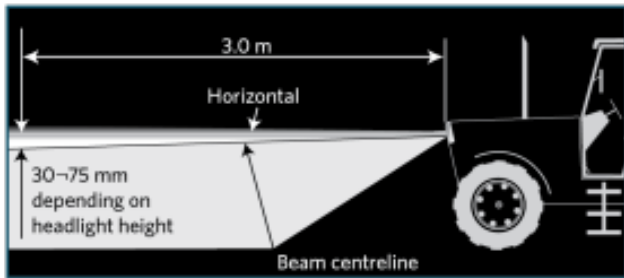
**Table 4-1-2. Dipped-beam angle conversions**

Percent (%)	mm/3m	Degrees (°)		Percent (%)	mm/3m	Degrees (°)
1.0	30	0.6		2.3	69	1.3
1.1	33	0.6		2.4	72	1.4
1.2	36	0.7		2.5	75	1.4
1.3	39	0.7		2.6	78	1.5
1.4	42	0.8		2.7	81	1.5
1.5	45	0.9		2.8	84	1.6
1.6	48	0.9		2.9	87	1.7
1.7	51	1.0		3.0	90	1.7
1.8	54	1.0		3.1	93	1.8
1.9	57	1.1		3.2	96	1.8
2.0	60	1.1		3.3	99	1.9
2.1	63	1.2		3.4	102	1.9
2.2	66	1.3		3.5	105	2.0

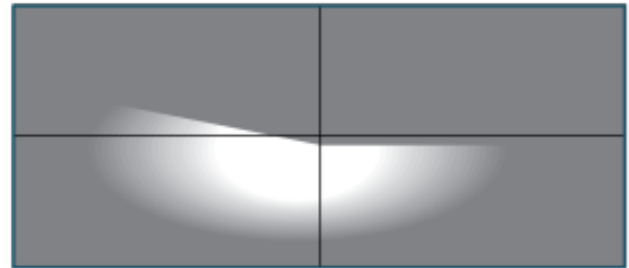
Figure 4-1-1. Headlamp beams



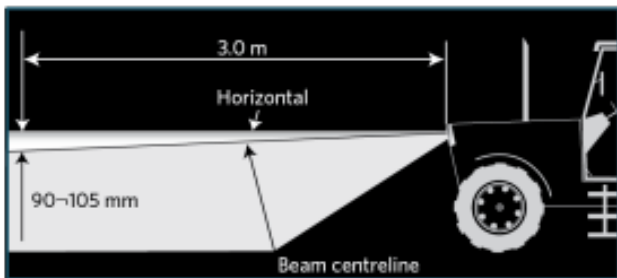
Minimum illuminated area



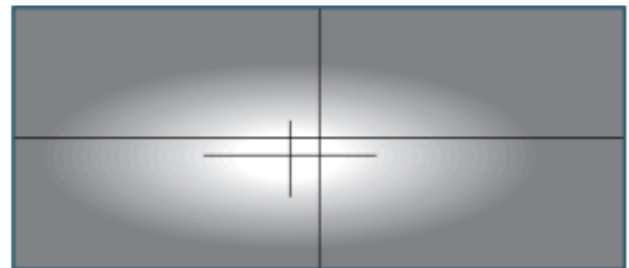
Asymmetric dipped beam



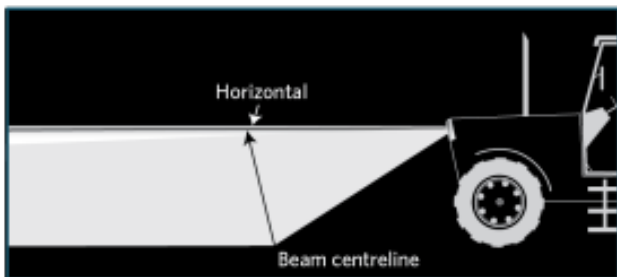
Asymmetric dipped-beam headlamp pattern on light board



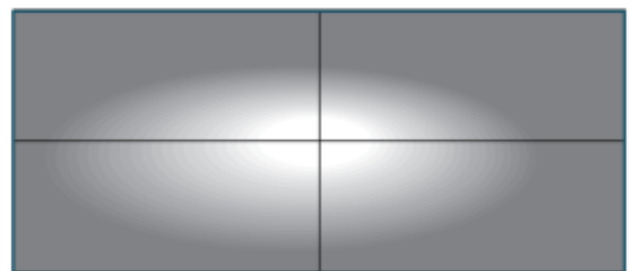
Symmetric dipped beam



Symmetric dipped-beam headlamp pattern on light board



Main (high) beam



Main- (high-) beam headlamp pattern on light board

## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004.](#)

## **Mandatory and permitted equipment**

1. A vehicle:
  - a) must be fitted with one pair of dipped-beam headlamps, and
  - b) may be fitted with one or two pairs of main-beam headlamps.
2. A warning device may be fitted that indicates that the main beam headlamps are switched on.
3. A retrofitted pair of headlamps must be symmetrically mounted as far towards each side of the vehicle as is practicable.

## **Prohibited equipment**

4. A dipped-beam headlamp designed solely for a left-hand drive vehicle, where the maximum intensity of the beam is dispersed to the right, must not be fitted.

## **Condition**

5. A headlamp must:
  - a) be in sound condition, and
  - b) not be obscured.

## **Performance**

6. A headlamp must operate in a way that is appropriate for the lamp and the vehicle.
7. A headlamp must emit a steady light.
8. A headlamp must provide sufficient illumination and light output to illuminate the road ahead.
9. A pair of headlamps must emit light that is approximately of equal colour and intensity when switched on.
10. A headlamp must emit a beam that is substantially white or amber.
11. A main-beam headlamp must be capable of being dipped or turned off from the driver's position.
12. A warning device that indicates that the main-beam lamps are in operation must be in good working order.
13. When the headlamps are switched on and the vehicle's front wheels are pointing in the straight ahead position:
  - a) the centre of a headlamp beam must be either parallel to or to the left of the longitudinal centreline of the vehicle, and
  - b) the centre of a main-beam headlamp beam must be either parallel to or dipping down from the horizontal, and
  - c) the centre of a dipped beam headlamp beam must dip at an angle specified in Table 4-1-1.
14. The dipped-beam headlamps must illuminate the road ahead for 50 m in normal darkness.
15. A headlamp must be fitted with a light source that is specified by the vehicle manufacturer or the headlamp manufacturer.

## 4-5 Direction indicator lamps

### Reasons for rejection

#### Mandatory and permitted equipment

1. A vehicle first registered in New Zealand before 1 January 2006 that is so constructed that the driver's arm signals cannot be seen from behind the vehicle is not fitted with one pair of rear direction indicator lamps.
2. A vehicle first registered on or after 1 January 2006 is not fitted with one pair of rear direction indicator lamps.
3. A vehicle is fitted with more than:
  - a) two pairs of lamps at the rear (other than top-mounted lamps), or
  - b) one pair of top-mounted lamps at the rear, or
  - c) two pairs of forward-facing lamps, or
  - d) two side-facing lamps on each side of the vehicle.
4. A vehicle is fitted with a lamp that is not in a pair.
5. A retrofitted lamp, other than a top-mounted lamp, is mounted at a height from the ground exceeding 1.5m (or 2.1m where fitting below 1.5m is not practicable due to the shape of the bodywork of the vehicle).
6. A pair of top-mounted lamps is not fitted as close as is practicable to the top corners of the bodywork.
7. A retrofitted pair of lamps is not:
  - a) symmetrically mounted, or
  - b) mounted as far towards each side of the vehicle as is practicable.
8. A vehicle is not fitted with a suitable device that indicates to the driver that a lamp has failed.

#### Condition

9. A lamp is insecure or, if a mandatory lamp, contains moisture in the form of large droplets, runs or puddles.
10. A lens is missing or has a hole, crack or other damage that allows moisture or dirt to enter.
11. A lamp's reflector is damaged or has deteriorated so that light output is reduced.
12. A visual lamp-failure warning device is obscured from the driver in the driver's seating position.

#### Performance

13. When switched on, a direction indicator lamp:
  - a) does not operate, or
  - b) does not begin flashing within one second of switching on, or
  - c) flashes:
    - i. faster than two flashes per second, or
    - ii. slower than one flash per second, or
    - iii. at a different rate from other lamps on the same side.

14. When switched on, a direction indicator lamp emits a light that is:
- a) not substantially amber or red to the rear, or
  - b) not substantially white or amber to the front, or
  - c) not substantially amber to the side, or
  - d) not approximately equal in colour or intensity to the other lamp in a pair, or
  - e) not bright enough to be visible from 100 m in normal daylight and from 200m in normal darkness, eg due to modification, deterioration, dirt or an incorrect light source, or
  - f) too bright, causing significant dazzle to other road users, eg due to an incorrect light source, or
  - g) altered, eg due to damage or modification.
15. A mandatory lamp mounted outside the original position emits a light that is not visible within (Figure 4-5-1):
- a) 15° above and below the horizontal, or
  - b) 45° inboard or 80° outboard.
16. A modification to the vehicle has reduced the visibility angles of a mandatory lamp to less than (Figure 4-5-1):
- a) 15° above and below the horizontal, or
  - b) 45° inboard or 80° outboard.
17. On a vehicle of American specification fitted with combined stop and indicator lamps, the stop lamp function is not overridden by the indicator function.
18. Where a lamp comprises an array of light sources (eg LEDs), fewer than 75% of these operate.
19. A lamp failure warning device does not operate.

#### **Note 1**

**Direction indicator lamp** means a lamp designed to emit a flashing light to signal the intention of the driver to change the direction of the vehicle to the right or to the left.

#### **Note 2**

A permitted (ie non-mandatory) rear- or a side-facing direction indicator lamp that does not comply with equipment, condition and performance requirements must be made to comply or disabled so that it does not emit a light.

#### **Note 3**

An **original equipment (OE) lamp** is one that is fitted by the vehicle manufacturer in the original position, or is an equivalent replacement or aftermarket lamp suitable for the position provided by the vehicle manufacturer for that lamp. All other lamps are considered retrofitted (ie non-OE).

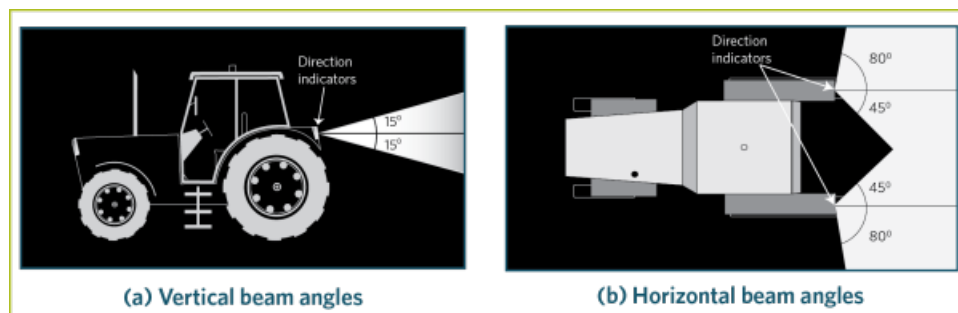
#### **Note 4**

Vehicles first registered in New Zealand before 27 February 2005 may have rear direction indicator lamps that also function as reversing lamps.

### Note 5

A vehicle originally manufactured with a direction-indicator-lamp arrangement that differs from what is required or permitted in this section may retain the original direction indicator lamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

**Figure 4-5-1. Direction indicator beam angles**



## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

### Mandatory and permitted equipment

1. A vehicle first registered in New Zealand before 1 January 2006 must be fitted with one or two pairs of rearward-facing lamps if the vehicle is so constructed that it prevents an arm signal given by the driver from being seen behind the vehicle.
2. A vehicle first registered anywhere on or after 1 January 2006 must be fitted with one or two pairs of lamps fitted to the rear of the vehicle.
3. A vehicle may be fitted with an additional pair of lamps at the rear of the vehicle that must be symmetrically mounted as far towards the top corners of the bodywork of the vehicle as is practicable (top-mounted lamps).
4. A vehicle may be fitted with one or two pairs of forward-facing lamps.
5. A vehicle may be fitted with one or two side-facing lamps on each side.
6. A suitable device must be fitted that indicates to the driver the failure of a mandatory lamp.
7. A retrofitted pair of lamps must be mounted:
  - a) symmetrically as far towards each side of the vehicle as is practicable, and
  - b) at a height from the ground not exceeding 1.5m, or if this is not practicable due to the shape of the bodywork of the vehicle, not exceeding 2.1m.
8. On vehicles of American specification, the stop lamp and direction indicator lamp function may be combined in one lamp.

## Condition

9. A direction indicator lamp must:

- a) be in sound condition, and
- b) not be obscured (if a mandatory lamp).

## Performance

10. A direction indicator lamp must operate in a way that is appropriate for the lamp and the vehicle.

11. A direction indicator lamp must emit a light that is substantially:

- a) red or amber to the rear, and
- b) white or amber to the front, and
- c) amber to the side.

11. A lamp must flash at a fixed frequency in the range of 1 to 2 Hertz.

12. Each lamp in a pair must, when operated, emit a light of approximately equal intensity, colour and frequency.

13. The lamp-failure indicating device must function.

14. A lamp must emit a light that is visible from 100 m during normal daylight and 200 m in normal darkness.

15. A mandatory lamp must emit a light that is visible within angles of:

- a) 15° above and below the horizontal, and
- b) 45° inboard, and
- c) 80° outboard.

16. If a vehicle of American specification is fitted with combined stop and indicator lamps, the indicator lamps must override the stop lamps so that the stop lamps operate as direction indicators.

17. Where a lamp comprises an array of light sources (eg LEDs), at least 75% of these must operate.

## 4-6 Forward-facing position lamps

### Reasons for rejection

#### Mandatory and permitted equipment

1. One pair of lamps is not fitted to:

- a) a vehicle first registered in New Zealand on or after 1 January 1978 that exceeds 1.5m in width, or
- b) a vehicle that exceeds 2m in width.

2. A vehicle is fitted with more than:

- a) one pair of lamps (other than top-mounted lamps), or
- b) two single lamps, or
- c) one pair of top-mounted lamps.

3. A retrofitted lamp, other than a top-mounted lamp, is mounted at a height from the ground exceeding 1.5m (or 2.1m where fitting below 1.5m is not practicable due to the shape of the bodywork of the vehicle).
4. A pair of top-mounted lamps is not fitted as close as is practicable to the top corners of the bodywork.
5. A retrofitted pair of lamps is not:
  - a) symmetrically mounted, or
  - b) mounted as far towards each side of the vehicle as is practicable.

### Condition

6. A lamp is insecure or, if a mandatory lamp, contains moisture in the form of large droplets, runs or puddles.
7. A lens is missing or has a hole, crack or other damage that allows moisture or dirt to enter.
8. A lamp's reflector is damaged or has deteriorated so that light output is reduced.
9. A mandatory lamp is obscured.

### Performance

10. When switched on, a forward-facing position lamp does not operate.
11. When switched on, a forward-facing position lamp emits a light that is not:
  - a) substantially white or amber, or
  - b) diffuse, or
  - c) projected to the front, or
  - d) approximately equal in colour or intensity to the other lamp in a pair, or
  - e) steady, or
  - f) bright enough to be visible from 200m in normal darkness, eg due to modification, deterioration, dirt or an incorrect light source.
12. A non-OE mandatory lamp mounted outside the original position emits a light that is not visible within (Figure 4-6-1):
  - a) 15° above and below the horizontal, or
  - b) 45° inboard or 80° outboard.
13. A modification to the vehicle has reduced the visibility angles of a mandatory lamp to less than (Figure 4-6-1):
  - a) 15° above and below the horizontal, or
  - b) 45° inboard or 80° outboard.
14. Where a lamp comprises an array of light sources (eg LEDs), fewer than 75% of these operate.

### Note 1

**Position lamp** means a low intensity lamp that is designed to indicate to road users the presence and dimensions of a vehicle, being:

- a) a forward-facing position lamp (front side lamp), or
- b) a rearward-facing position lamp (rear side lamp or tail lamp), or

- c) a side-marker lamp, or
- d) an end-outline marker lamp (including cab roof lamp).

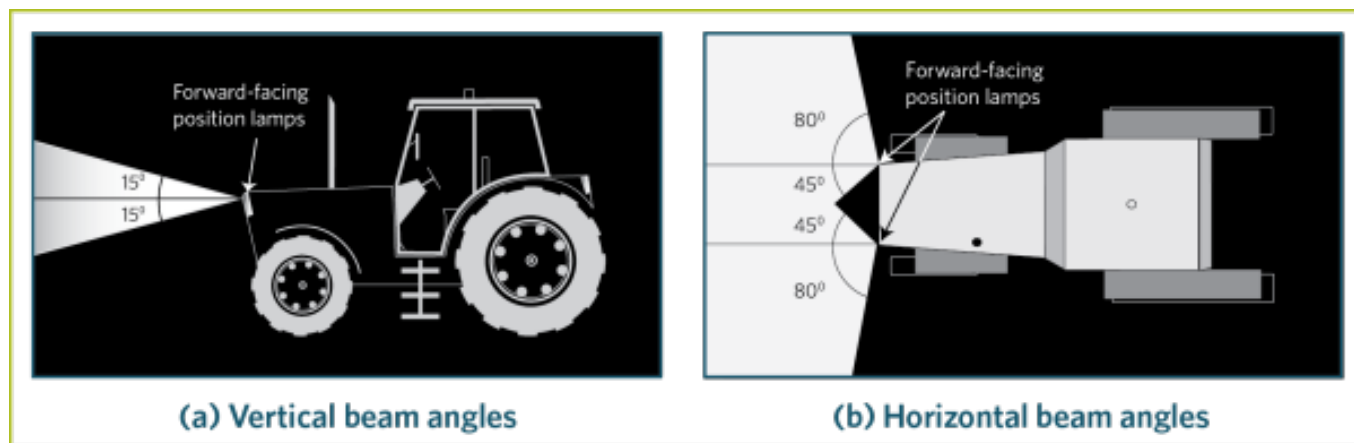
**Note 2**

An **original equipment (OE) lamp** is one that is fitted by the vehicle manufacturer in the original position, or is an equivalent replacement or aftermarket lamp suitable for the position provided by the vehicle manufacturer for that lamp. All other lamps are considered retrofitted (ie non-OE).

**Note 3**

A vehicle originally manufactured with a forward-facing position lamp arrangement that differs from what is required or permitted in this section may retain the original forward-facing position lamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

**Figure 4-6-1. Forward-facing position lamp beam angles**



## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

### Mandatory and permitted equipment

1. One pair of lamps must be fitted to:
  - a) a vehicle first registered in new Zealand on or after 1 January 1978 that exceeds 1.5m in width, or
  - b) a vehicle that exceeds 2m in width.
2. One or two lamps may be fitted to:
  - a) a vehicle that does not exceed 1.5m in width, or
  - b) a vehicle first registered in New Zealand before 1 January 1978 that does not exceed 2m in width.
3. A retrofitted pair of lamps must be symmetrically mounted as far towards each side of the vehicle as is practicable.

4. A retrofitted lamp must be mounted at a height from the ground not exceeding 1.5m, or if this is not practicable due to the shape of the bodywork of the vehicle, not exceeding 2.1m.
5. A vehicle may be fitted with one additional pair of forward-facing position lamps that must be symmetrically mounted as far towards the top corners of the vehicle as is practicable (top-mounted lamps).

### **Condition**

6. A forward-facing position lamp must:
  - a) be in sound condition, and
  - b) not be obscured (if a mandatory lamp).

### **Performance**

7. A forward-facing position lamp must operate in a way that is appropriate for the lamp and the vehicle.
8. A lamp must emit a light that is:
  - a) diffuse, and
  - b) substantially white or amber, and
  - c) steady, and
  - d) sufficient to indicate to other road users the presence and dimensions of the vehicle, and
  - e) visible from 200m in normal darkness, and
  - f) of approximately equal intensity and colour to the other lamp of a pair.
9. A mandatory lamp must be visible within angles of:
  - a) 15° above and below the horizontal, and
  - b) 45° inboard, and
  - c) 80° outboard.
10. Where a lamp comprises an array of light sources (eg LEDs), at least 75% of these must operate.

## **4-7 Rearward-facing position lamps**

### **Reasons for rejection**

#### **Mandatory and permitted equipment**

1. A vehicle first registered in New Zealand on or after 1 January 1978 that is more than 1.5m wide is:
  - a) not fitted with one pair of lamps, or
  - b) fitted with more than two pairs of lamps (other than top-mounted lamps), or
  - c) fitted with a lamp that is not in a pair.
2. A vehicle first registered in New Zealand before 1 January 1978 or is less than 1.5m wide is:
  - a) not fitted with a single lamp or one pair of lamps, or

- b) fitted with more than one single lamp, or
  - c) fitted with more than two pairs of lamps (other than top-mounted lamps).
3. A vehicle is fitted with more than one pair of top-mounted lamps.
4. A single lamp is fitted to the left of the centre of the vehicle.
5. A pair of top-mounted lamps is not fitted as close as is practicable towards the top corners of the bodywork.
6. A retrofitted lamp, other than a top-mounted lamp, is mounted at a height from the ground exceeding 1.5m (or 2.1m where fitting below 1.5m is not practicable due to the shape of the bodywork of the vehicle).
7. A retrofitted pair of lamps is not:
- a) symmetrically mounted, or
  - b) mounted as far towards each side of the vehicle as is practicable.

### **Condition**

8. A lamp is insecure or, if a mandatory lamp, contains moisture in the form of large droplets, runs or puddles.
9. A lens is missing or has a hole, crack or other damage that allows moisture or dirt to enter.
10. A lamp's reflector is damaged or has deteriorated so that light output is reduced.
11. A mandatory lamp is obscured.

### **Performance**

12. When switched on, a mandatory lamp does not operate.
13. When switched on, a lamp emits a light that is not:
- a) substantially red, or
  - b) diffuse, or
  - c) projected to the rear, or
  - d) approximately equal in colour or intensity to that of the other lamp in a pair, or
  - e) steady, or
  - f) bright enough to be visible from 200m in normal darkness, eg due to modification, deterioration, dirt or an incorrect light source.
14. A non-OE mandatory lamp mounted outside the original position emits a light that is not visible within (Figure 4-7-1):
- a) 15° above and below the horizontal, or
  - b) 45° inboard or 80° outboard.
15. A modification to the vehicle has reduced the visibility angles of a mandatory lamp to less than (Figure 4-7-1):
- a) 15° above and below the horizontal, or
  - b) 45° inboard or 80° outboard.
14. Where a lamp comprises an array of light sources (eg LEDs), fewer than 75% of these operate.

**Note 1**

**Position lamp** means a low-intensity lamp that is designed to indicate to road users the presence and dimensions of a vehicle, being:

- a) a forward-facing position lamp (front side lamp), or
- b) a rearward-facing position lamp (rear side lamp or tail lamp), or
- c) a side-marker lamp, or
- d) an end-outline marker lamp (including cab roof lamp).

**Note 2**

A permitted rearward-facing position lamp that does not comply with equipment, condition and performance requirements must be made to comply or be disabled so that it does not emit a light.

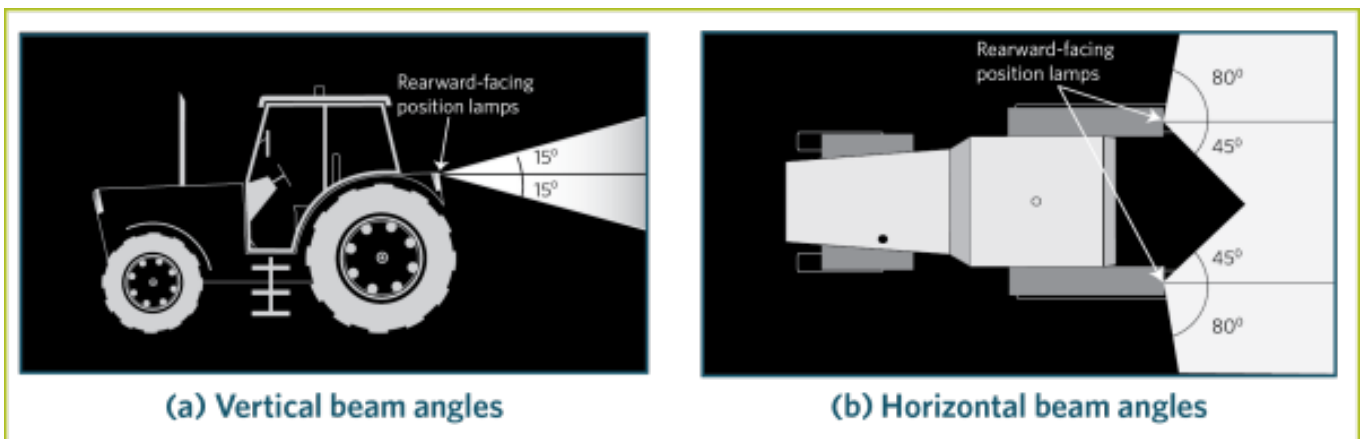
**Note 3**

An **original equipment (OE) lamp** is one that is fitted by the vehicle manufacturer in the original position, or is an equivalent replacement or aftermarket lamp suitable for the position provided by the vehicle manufacturer for that lamp. All other lamps are considered retrofitted (ie non-OE).

**Note 4**

A vehicle originally manufactured with a rearward-facing position lamp arrangement that differs from what is required or permitted in this section may retain the original rearward-facing position lamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

**Figure 4-7-1. Rearward-facing position lamp beam angles**



# Summary of legislation

## Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

## Mandatory and permitted equipment

1. A vehicle first registered in New Zealand on or after 1 January 1978 and that is more than 1.5m wide must be fitted with one or two pairs of rearward-facing position lamps.
2. A vehicle that was first registered in New Zealand before 1 January 1978 or that does not exceed 1.5m in width must be fitted with:
  - a) one single rearward-facing position lamp in the centre or to the right of the centre of the vehicle, or
  - b) one or two pairs of rearward-facing position lamps.
3. A retrofitted pair of lamps must be mounted:
  - a) symmetrically as far towards each side of the vehicle as is practicable, and
  - b) at a height from the ground not exceeding 1.5m, or if this is not practicable due to the shape of the bodywork of the vehicle, not exceeding 2.1m.
4. A vehicle may be fitted with an additional pair of rearward-facing position lamps symmetrically mounted as far towards each side and top of the bodywork of the vehicle as possible (top-mounted lamps).

## Condition

5. A rearward-facing position lamp must:
  - a) be in sound condition, and
  - b) not be obscured (if a mandatory lamp).

## Performance

6. A rearward-facing position lamp must operate in a way that is appropriate for the lamp and the vehicle.
7. A lamp must emit a light that is:
  - a) diffuse, and
  - b) substantially red.
8. A lamp must emit a steady light.
9. A lamp must provide sufficient light output to indicate to other road users the presence and dimensions of the vehicle.
10. A lamp must emit light that is visible from a distance of 200m in normal darkness.
11. A mandatory lamp must be visible within angles of 15° above and below the horizontal, and within 45° inboard and 80° outboard.
12. Each lamp in a pair must, when operated, emit a light of approximately equal intensity and colour.
13. Where a lamp comprises an array of light sources (eg LEDs), at least 75% of these must operate.

## 4-8 Side-marker lamps

### Reasons for rejection

#### Permitted and prohibited equipment

1. A vehicle that has a length of less than 6m is fitted with a side-marker lamp.
2. A vehicle is fitted with side-marker lamps that do not give an indication of the vehicle's dimensions.

#### Condition

3. A lamp is insecure.
4. A lens is missing or has a hole, crack or other damage that allows moisture or dirt to enter.
5. A reflector is damaged or has deteriorated so that light output is reduced.

#### Performance

6. When switched on, a lamp emits a light that is not:
  - a) steady, or
  - b) diffuse, or
  - c) substantially red or amber to the rear, or
  - d) substantially white or amber to the front.
7. Where a lamp comprises an array of light sources (eg LEDs), fewer than 75% of these operate.

#### Note 1 Definitions

**Side-marker lamp** means a position lamp designed to be fitted to the side of a vehicle or its load.

**Position lamp** means a low-intensity lamp that is designed to indicate to road users the presence and dimensions of a vehicle, being:

- a) a forward-facing position lamp (front side lamp), or
- b) a rearward-facing position lamp (rear side lamp or tail lamp), or
- c) a side-marker lamp, or
- d) an end-outline marker lamp (including cab roof lamp).

#### Note 2

A permitted side-marker lamp that does not comply with equipment, condition and performance requirements must be made to comply or be disabled so that it does not emit a light.

#### Note 3

A vehicle originally manufactured with a side-marker lamp arrangement that differs from what is required or permitted in this section may retain the original side-marker position lamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

# Summary of legislation

## Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

## Permitted and prohibited equipment

1. A vehicle with a length of 6m or more may be fitted with one or more side-marker lamps on each side.
2. A vehicle with a length of less than 6m must not be fitted with side-marker lamps.
3. The position of the lamps must be such that it gives an indication of the vehicle's dimensions.

## Condition

4. A side-marker lamp must be in good condition.

## Performance

5. A side-marker lamp must operate in a way that is appropriate for the lamp and for the vehicle.
6. A lamp must emit a light that is:
  - a) steady, and
  - b) diffuse, and
  - c) substantially red or amber to the rear, and
  - d) substantially white or amber to the front.
7. Where a side-marker lamp comprises an array of light sources (eg LEDs), at least 75% of these must operate.

## 4-10 Stop lamps

## Reasons for rejection

### Mandatory and permitted equipment

1. A vehicle first registered in New Zealand on or after 1 January 1978 is:
  - a) not fitted with one pair of stop lamps, or
  - b) fitted with a stop lamp that is not in a pair.
2. A vehicle first registered in New Zealand before 1 January 1978 is:
  - a) not fitted with one single lamp or one pair of lamps, or
  - b) fitted with more than one single lamp.
3. A vehicle is fitted with more than:
  - a) two pairs of lamps other than top-mounted lamps, or
  - b) one pair of top-mounted lamps.

4. A retrofitted stop lamp other than a top-mounted lamp is fitted at a height from the ground exceeding 1.5m (or 2.1m where fitting below 1.5m is not practicable due to the shape of the bodywork of the vehicle).
5. A pair of top-mounted lamps is not fitted as far as is practicable towards the top corners of the bodywork of the vehicle.
6. A retrofitted pair of lamps is not:
  - a) symmetrically mounted, or
  - b) mounted as far towards each side of the vehicle as is practicable.

### Condition

7. A lamp is insecure.
8. A lens is missing or has a hole, crack or other damage that allows moisture or dirt to enter.
9. A reflector is damaged or has deteriorated so that light output is reduced.
10. A mandatory lamp is obscured, or contains moisture in the form of large droplets, runs or puddles.

### Performance

11. When the service brake is activated:
  - a) a mandatory lamp does not operate, or
  - b) a lamp does not remain steadily illuminated.
12. A lamp operates when the service brake is not applied.
13. A lamp emits a light that is:
  - a) not substantially red, or
  - b) not diffuse, or
  - c) not projected to the rear, or
  - d) not approximately equal in colour or intensity from the other lamp in a pair, or
  - e) not bright enough to produce a light that is visible from 100m in normal daylight, eg due to modification, deterioration, dirt or an incorrect light source.
14. A non-OE mandatory lamp mounted outside the original position emits a light that is not visible within (Figure 4-10-1):
  - a) 15° above and below the horizontal, or
  - b) 45° inboard and outboard.
15. A modification to the vehicle has reduced the visibility angles of a mandatory lamp to less than (Figure 4-10-1):
  - a) 15° above and below the horizontal, or
  - b) 45° inboard and outboard.
16. On a vehicle of American specification fitted with combined stop and direction indicator lamps, the stop lamp function is not overridden by the indicator function.
17. Where a lamp comprises an array of light sources (eg LEDs), fewer than 75% of these operate.

## Note 2

A permitted stop lamp that does not comply with equipment, condition and performance requirements must be made to comply or be disabled so that it does not emit a light.

## Note 3

An **original equipment (OE) lamp** is one that is fitted by the vehicle manufacturer in the original position, or is an equivalent replacement or aftermarket lamp suitable for the position provided by the vehicle manufacturer for that lamp. All other lamps are considered retrofitted (ie non-OE).

## Note 4

A vehicle originally manufactured with a stop-lamp arrangement that differs from what is required or permitted in this section may retain the original stop lamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

## Figure 4-10-1. Stop lamp visibility angles

# Summary of legislation

## Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

Mandatory and permitted equipment

1. A vehicle first registered in New Zealand on or after 1 January 1978 must be fitted with one or two pairs of stop lamps.
2. A vehicle first registered in New Zealand before 1 January 1978:
  - a) may be fitted with one stop lamp or one or two pairs of stop lamps, or
  - b) must be fitted with one stop lamp or one or two pairs of stop lamps if the vehicle is so constructed that it prevents the driver's arm signal from being seen from behind the vehicle.
3. A retrofitted pair of stop lamps must be symmetrically mounted as far towards each side of the vehicle as is practicable.
4. A retrofitted stop lamp must be fitted at a height from the ground not exceeding 1.5m, or if this is not practicable due to the shape of the bodywork of the vehicle, not exceeding 2.1m.
5. A vehicle may be fitted at the rear with an additional pair of stop lamps provided they are positioned as close as is practicable to the top of the bodywork of the vehicle (top-mounted lamps).

## Condition

6. A stop lamp must:
  - a) be in sound condition, and

b) not be obscured (if a mandatory lamp).

### Performance

7. A stop lamp must operate in a way that is appropriate for the lamp and the vehicle.
8. The light emitted from a stop lamp must be diffuse light that is substantially red.
9. A required stop lamp must operate when a service brake is activated.
10. A required stop lamp must provide sufficient light output to be visible from 100m.
11. A stop lamp must emit a steady light.
12. A retrofitted mandatory stop lamp must emit a light that is visible within the angles of 15° above and below the horizontal, and 45° inboard and outboard.
13. If a vehicle of American specification is fitted with combined stop and direction indicator lamps, the indicator lamps must override the stop lamps so that the stop lamps will operate as direction indicators.
14. Where a stop lamp comprises an array of light sources (eg LEDs), at least 75% of these must operate.

Page amended **28 April 2014** (see [amendment details](#)).

## 4-12 Rear-reg.-plate illumination lamps

### Reasons for rejection

#### Mandatory equipment

1. A vehicle is not fitted with at least one rear-registration-plate illumination lamp.

#### Condition

2. A lamp is insecure.
3. A lens is missing, or has a hole, crack or other damage that allows moisture or dirt to enter.
4. A reflector, or lens, is damaged or has deteriorated so that light output is reduced.

#### Performance

5. The lamp emits a light that is not:
  - a) substantially white, or
  - b) steady, or
  - c) diffuse.
6. The lamp does not illuminate the registration plate (eg either the lamp or plate have been moved, or the lamps orientation has been changed).
7. The light source of a lamp is visible from the rear of the vehicle.

#### Note 1

**Rear-registration-plate illumination lamp** means a lamp designed to illuminate the rear registration plate of a vehicle.

## Note 2

A vehicle originally manufactured with a rear-registration-plate illumination lamp arrangement that differs from what is required or permitted in this section may retain the original rear-registration-plate illumination lamps provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

## Summary of legislation

### Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

### Mandatory equipment

1. A vehicle must be fitted with at least one rear-registration-plate illumination lamp.

### Performance

2. A rear-registration-plate illumination lamp must operate in a way that is appropriate for the lamp and the vehicle.
3. A lamp must emit a diffuse light that is substantially white.
4. A rear-registration-plate illumination lamp must emit a steady light.
5. The light source of the lamp must not be visible from the rear of the vehicle.
6. A lamp must illuminate the figures and letters of the plate so that they are visible from 20m during normal darkness.
7. Where a lamp comprises an array of light sources (eg LEDs), at least 75% of these must operate.

Page amended 1 October 2021 (see [amendment details](#)).

## 4-13 Rear reflectors

## Reasons for rejection

### Mandatory and permitted equipment

1. A vehicle is:
  - a) not fitted with at least one rearward-facing reflector on each side, or
  - b) fitted with a rearward-facing reflector that is not in a pair.
2. A reflector is not positioned to the rear of the vehicle.
3. A retrofitted reflector is fitted at a height from the ground exceeding 1.5m (or 2.1m where fitting below 1.5 m is not practicable due to the shape of the bodywork of the vehicle).
4. A retrofitted pair of reflectors is not:
  - a) symmetrically mounted, or
  - b) mounted as far towards each side of the vehicle as is practicable.

## Condition

5. A mandatory reflector's ability to reflect light is affected by excessive:
  - a) fading, or
  - b) scratching or other damage.
6. A mandatory reflector is obscured.

## Performance

7. The reflected light from a mandatory reflector is not visible from 100m.
8. The reflected light from a reflector is not red.

## Note 1 Definitions

**Reflector** means a discreet item of lighting equipment that is designed to reflect incident light back towards the light source, but does not include reflective material (such as reflective tape).

**Reflective material** means any material that is designed to reflect incident light back towards the light source, and includes reflective tape, but does not include a reflector.

## Note 2

A vehicle originally manufactured with a rear reflector arrangement that differs from what is required or permitted in this section may retain the original rear reflectors provided they remain fitted in their original position and perform as intended by the vehicle manufacturer.

# Summary of legislation

## Applicable legislation

- [Land Transport Rule: Vehicle Lighting 2004](#).

## Mandatory and permitted equipment

1. A vehicle must be fitted with at least one pair of rearward-facing reflectors at a height from the ground not exceeding 1.5m, or if this is not practicable due to the shape of the bodywork of the vehicle, not exceeding 2.1m.
2. A rearward-facing reflector must be positioned to the rear of the vehicle.
3. A reflector must be of an area that allows it to reflect light to improve the visibility of the vehicle to other road users, but it must not cause them undue dazzle or discomfort.
4. A retrofitted pair of reflectors must be symmetrically mounted as far towards each side of the vehicle as is practicable.

## Condition

5. A mandatory reflector must be in good condition and not be obscured.

## Performance

6. A reflector must operate in a way that is appropriate for the reflector and the vehicle.

7. A reflector must reflect white light as substantially red light.

8. A reflector must provide sufficient light reflection to fulfil its intended purpose.