Correct as at 26th April 2026. It may be superseded at any time.

Extract taken from: Heavy vehicle specialist certification > Towing connections > Towbars

9-3 Towbars

Certifier categories: **HVET** | **HMTD**

Reasons for rejection

1. An articulated bus is fitted with a towing coupling.

2. The trailer is not a:

    a) simple trailer, or

    b) full trailer, or

    c) pole trailer.

3. A towbar rated less than 3500kg MTM does not meet the requirements of NZS 5467.

4. A drawbar rated less than 3500kg MTM does not meet the requirements of NZS 5467.

5. A vehicle fitted with a towbar designed to tow trailers with a gross weight not exceeding 2000kg does not have a means of securely attaching a safety chain or cable.

6. The means of securing the safety chain or cable is not positively attached to the towing vehicle with a mechanical device of sufficient strength that will remain secure under all conditions.

7. The means of securing the safety chain or cable is a chain slot.

8. A trailer under 2000kg does not have a safety chain.

9. The coupling components are worn beyond the manufacturer’s specifications.

10. New coupling fasteners have not been used if the coupling installed has been used in service.

11. The fasteners used do not meet the coupling manufacturer’s specifications.

12. A coupling does not have:

    a) an effective locking device, or

    b) a separate means of retaining the locking device in the locked position.

13. The locking of the coupling is not readily verifiable by visual inspection.

14. A 50-mm-diameter ball coupling fitted does not comply with NZS 5232: 1993, Specification for Ball-and-Socket Type Trailer Couplings.

15. A 1? inch diameter ball coupling fitted does not comply with the performance and marking requirements of NZS 5232: 1993, Specification for Ball-and-Socket Type Trailer Couplings except that the ball size markings must be 1?”.

16. A coupling other than a 50mm or 1? inch diameter ball coupling does not meet the specifications of NZS 5446: 1987.

17. A towbar has not been manufactured to the Certificate of Design Compliance specifications when an approved design is used for the certification of the component.

18. The towbar has not been attached according to the Certificate of Design Compliance specifications when an approved design is used for the certification of the component.

19. The welding does not comply with the AS/NZS 1554 or other appropriate welding standards for the material and welding method employed.

20. A towbar repair does not comply with the applicable standard.

21. The attachment points and or the towbar is affected by corrosion or weakening, that is apparent by visual examination, that may make it unsafe.

22. The chassis of a vehicle fitted with a towbar is of insufficient strength to withstand the loads imposed on it.

23. The length of a towing vehicle exceeds 11.5m.

24. The length of a towed vehicle other than a semi-trailer or a high productivity vehicle exceeds 12.5m.

25. The maximum forward distance of a simple trailer or pole trailer with the drawbar fully extended exceeds 8.5 m.

26. The maximum length of a combination vehicle other than a high productivity vehicle where the towed vehicle is a full trailer exceeds 20.0m excluding load.

27. The maximum length of a combination vehicle other than a high productivity vehicle where the towed vehicle is a simple trailer exceeds 22.0m.

28. The maximum length of a combination vehicle other than a high productivity vehicle where the towed vehicle is not a simple trailer or a full trailer, exceeds 20.0m.

29. The inter-vehicle spacing between a towing vehicle and a full trailer, when in a straight line, is less than the greater of 1.0 m or half the width of the of the foremost point of the trailer (including its load but excluding the drawbar and dolly assembly).

30. The rear trailing unit distance exceeds 14.5m.

31. The inter-vehicle spacing except for a laden pole trailer exceeds 4.0m.

32. Parts of the towed and towing vehicle, other than its coupling mechanism, come into contact when completing a 360-degree turn at a diameter of 25m.

33. The original date of manufacture and attachment to the vehicle of a towbar cannot be demonstrated.

34. The dimensions, material sizes and all welding details have not been recorded.

35. A full design stress analysis has not been completed or is unavailable.

36. An NDT inspection and report have not been completed to section 7 of AS/NZS 1554.1: 2000 when required.

37. The welds of the towbar that are inspected and do not meet section 6 of AS/NZS 1554.1: 2000.

38. A towbar that requires re-certification does not meet the requirements for stress or residual life of the re-certification process shown in the charts in **section 12-3**

39. A towbar does not have an identification label as required by the standard (Note 1)(Note 2).

Note 1

Where an identification plate is damaged, illegible or lost the original certifier may supply a replacement plate stating the original expiry date provided that the certifier can verify that the towbar has not been modified or repaired without subsequent certification (see **Technical bulletin 14: Lost or illegible identification plates for drawbars, drawbeams and towbars)**.

Note 2

From 1 October 2020, where a rating is not applicable ‘N/A’ must be stamped on the plate.

Table 9-3-1. Dimension requirements for vehicles and vehicle combinations (abridged)

Dimension	Distance (metres except where indicated otherwise)
Overall length (excluding collapsible mirrors):	
Towing vehicle, full trailer, simple trailer, pole trailer (excludinvg load)	11.5
Any other combination of vehicles	20.0
Forward distance (excluding collapsible mirrors):	
Rigid vehicle	8.5 if fitted with tow coupling, 9.5 otherwise
Full Trailer, simple trailer, pole trailer with drawbar at full extension, articulated bus (both front and rear sections), semi-trailer	8.5
Rear overhang:	
Heavy rigid vehicle	4.0 or 70% of wheelbase (whichever is less) for a vehicle whose rearmost axle is a non-steering axle
4.25 or 70% of wheelbase (whichever is less) for a vehicle whose rearmost axle is a steering axle	
Articulated bus, heavy semi-trailer, heavy simple trailer, heavy pole trailer with one axle set	4.0 or 50% of forward distance (whichever is less)
Heavy full trailer, heavy pole trailer with two axle sets	4.0 or 50% of wheelbase (whichever is less)
All other vehicles	4.0
Rear trailing unit distance:	
A-Train, B-Train, towing vehicle and two trailers	14.5

Articulated point of attachment (excluding articulated buses)	No further rearward than the rearmost axle of the towing vehicle or rearmost axle of the leading trailer, and if the towing vehicle is a rigid vehicle and has more than one axle in its rear set, not more than 300 mm rearward of the rear axis of the towing vehicle
Tow coupling position (for towing heavy trailer):	
Full trailer	40% of wheelbase of towing vehicle

Summary of Legislation

Applicable references

- NZS 5467: 1993
- NZS 5446: Heavy vehicle towing connections – Drawbeams and drawbars
- AS/NZS 1554 parts 1 to 6
- Welding in the transport industry (NZTA publication) - **Technical bulletin 10**
- AS/NZS 2980:2018; Qualification of welders for fusion welding of steels – Additional requirements for Australia and New Zealand
- AS/NZS ISO9606.1: 2017 Qualification testing of welders – Fusion Welding.

Applicable legislation

- **Land Transport Rule: Passenger Service Vehicles 1999**
- **Land Transport Rule: Vehicle Dimensions and Mass 2002**
- **Land Transport Rule: Heavy Vehicles 2004**

General requirements for dimension and mass limits

1. Except as otherwise provided in this section and in 1.2(3) [of the Rule], a vehicle must comply with the applicable requirements in Table 4.1 [of the Rule (abridged in Table 9-3-1), and with other applicable requirements in this section.

2. In carrying out a 360-degree turn at the 25m diameter, no part of a vehicle in a combination, other than its articulation mechanism, may come into contact with the other vehicle in the combination.

Towing requirements (section 4.6)

3. A trailer must be of one of the following types:

a) a simple trailer

b) a semi-trailer

c) a full trailer

d) a pole trailer.

4. Except as provided in requirement 5 below, a light motor vehicle may not tow more than one trailer.

5. Despite requirement 4, a tractor may tow two light trailers, provided that the tractor manufacturer’s ratings are not exceeded.

6. A heavy motor vehicle may not tow more than one trailer, except if that vehicle is:

a) an A-train, or

b) a B-train, or

c) a rigid vehicle towing a converter dolly coupled to a semi-trailer, or

d) a rigid vehicle towing two trailers whose total gross mass is less than 20,000kg, provided the rearmost trailer is a light trailer, or

e) a vehicle operating as an overweight or overdimension vehicle.

7. Except as specified in requirement 8, a light motor vehicle may tow a trailer, provided that, if the light motor vehicle is towing a heavy trailer, the gross mass of the trailer does not exceed 1.5 times the gross mass of the towing vehicle or the maximum towed mass specified by the manufacturer.

8. A light passenger service vehicle may not tow a trailer that has a gross vehicle mass of 2000kg or more.

9. A heavy passenger service vehicle may not tow a trailer that has a gross vehicle mass exceeding 3500kg.

10. An articulated bus may not tow a trailer.

Passenger Service Vehicle Rule

Towing and towbars

11. The towbar of a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, and a towbar fitted to a vehicle after this date, must comply with the version of New Zealand Standard 5467: 1993 that was applicable at the time the towbar was fitted, and must be certified accordingly.

12. The chassis of a passenger service vehicle fitted with a towbar must have sufficient strength to withstand the forces imposed on it by the trailer.

Heavy Vehicle Rule

Towing connection requirements

13. Towing connection components fitted to a vehicle must ensure that a secure connection can be maintained between the towing and towed vehicles under all conditions of loading and operation for which the vehicle was constructed.

Drawbeams and towbars (section 4.4)

14. A towbar fitted to a vehicle before 1 April 2006 must comply with:

a) NZS 5467: 1993, Code of Practice for Light Trailers, or

b) NZS 5446: 1987, Code of Practice for Heavy Motor Vehicle Towing Connections: Drawbar Trailers, or

c) NZS 5446: 1987, Code of Practice for Heavy Motor Vehicle Towing Connections: Drawbar Trailers amended by Appendix A to Policy Statement 5 for towbars rated for a maximum towed mass of 2000kg or less.

15. A towbar fitted to a vehicle on or after 1 April 2006 for towing a light trailer must comply with NZS 5467: 1993, Code of Practice for Light Trailers.

Couplings (section 4.6)

16. A coupling must have an effective locking device and a separate means of retaining this device in the locked position.

17. Locking of a coupling must be readily verifiable by visual inspection.

18. A 50mm diameter tow ball fitted to a vehicle for towing a light trailer must comply with NZS 5232: 1993, Specification for Ball-and-Socket Type Trailer Couplings

19. A 1? inch diameter tow ball fitted to a vehicle for towing a light trailer must comply with the performance and marking requirements of NZS 5232: 1993 Specification for Ball-and-Socket Type Trailer Couplings, except that the ball size marking must be 1?".

20. A device fitted to the front of a vehicle to enable it to be recovered, together with its connection to the chassis, must be suitable for this purpose.

Passenger Service Vehicle Rule

Towing and tow-bars (section 6.13)

21. A passenger service vehicle must not tow heavy trailers.

22. The tow-bar of a motor vehicle which entered service as a passenger service vehicle in New Zealand on or after 1 September 1999, and a tow-bar fitted to a vehicle after this date, must comply with the version of New Zealand Standard 5467: 1993 that was applicable at the time the tow-bar was fitted, and must be certified accordingly.

23. The chassis of a passenger service vehicle fitted with a tow-bar must have sufficient strength to withstand the forces imposed on it by the trailer.

Page amended **1 October 2020** (see **amendment details**)