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 It may be superseded at any time.

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

9-1 Drawbeams

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

Reasons for rejection

See also Table 3-1-1. in the Dimensions section

1. The towing connection fitted to the rear of a heavy vehicle recovery vehicle does not comply with NZS 5446.

2. A drawbeam rated 3500kg MTM or over does not meet the requirements of NZS 5446.

3. The coupling components are worn beyond the manufacturer's specifications.

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

5. The fasteners used do not meet the coupling manufacturer's specifications.

6. A coupling does not have:

    a) an effective locking device, or

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

    c) a failsafe system that prevents unintentional release of an air assisted automatic coupling device (if fitted).

        - See also **Safety alert: Risk of vehicle separation – air operated auto coupling devices**

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

8. A coupling other than a 50mm or 1?" diameter ball coupling does not meet the specifications of NZS 5446.

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

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

11. A drawbeam has been welded by an operator who is not known or is not qualified in both process and position .

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

13. A drawbeam repair does not comply with the applicable standard.

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

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

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

17. When towing a full trailer (GVM exceeding 3500kg) the tow coupling is located further rearwards of the rear axis of the rigid towing vehicle than 45% of the towing vehicle's wheelbase.

18. When towing a simple trailer (GVM exceeding 3500kg) the tow coupling is located less than 0.7m rearwards of the rear axis of the towing vehicle.

19. When towing a simple trailer (GVM exceeding 3500kg) the tow coupling is located more than 50% of the towing vehicle's wheelbase rearwards of the rear axis of the towing vehicle.

20. The maximum length of a combination vehicle exceeds 20.0m.

21. 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.

22. A drawbeam originally designed using the recommended practice for towing connections published by the New Zealand Truck-Trailer Manufacturer's Federation does not meet the requirements of NZS 5446: 1987.

23. The original date of manufacture and attachment to the vehicle of a drawbeam cannot be demonstrated.

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

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

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

26. The welds of the drawbar/beam or towbar that are inspected do not meet section 6 of AS/NZS 1554.1: 2000.

27. A drawbeam 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**

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

29. A vehicle has been modified in such a way that the braking or braking system may have been affected and it has not been referred to a certifier with the brakes category unless the modification is covered in the vehicle's body builders manual and the manufacturer has supplied written evidence that the vehicle remains within its original brake certification (refer to **Technical bulletin 4**).

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 drawbeam has not been modified, repaired or has not exceeded its expiry date (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.

Note: for dimension requirements see **Table 3-1-1 in the Dimensions section**

Summary of legislation

Applicable references

- NZS 5446: Heavy vehicle towing connections – Drawbeams and drawbars
- NZS 5467: 1993
- 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 2016**
- **Land Transport Rule: Heavy Vehicles 2004**.

Land Transport Rule: Vehicle Dimensions and Mass 2016

General requirements for dimension and mass limits

1. Except as otherwise provided in this section and in **Land Transport Rule: Vehicle Dimensions and Mass 2016**, a vehicle must comply with the applicable requirements of **Land Transport Rule: Vehicle Dimensions and Mass 2016**, and with other applicable requirements in this section.

2. The inter-vehicle spacing between a towing vehicle and a full trailer, when in a straight line, must not be less than the greater of 1m or half the width of the foremost point of the trailer (including its load but excluding the drawbar and front dolly assembly).

3. In carrying out a 360-degree turn at 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.

4. A drawbeam must not be sliding or adjustable.

Towing requirements (section 4.6)

5. 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.

6. Except as provided in requirement 7 below, a light motor vehicle may not tow more than one trailer.

7. Despite requirement 6, a tractor may tow two light trailers, provided that the tractor manufacturer’s ratings are not exceeded.

8. 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.

9. Except as specified in requirement 10, 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.

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

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

12. An articulated bus may not tow a 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 drawbeam fitted to a vehicle used in a combination must, unless requirement 15 applies, comply with NZS 5446 1987, Code of Practice for Heavy Motor Vehicle Towing Connections: Drawbar Trailers.

15. A drawbeam fitted to a vehicle that, before 1 February 1989, was certified for compliance with the *Recommended Practice for Towing Connections* published by the New Zealand Truck-Trailer Manufacturers' Federation, must, by the date of issue of the first Certificate of Fitness issued on or after 1 March 2006:

a) comply with *NZS 5446: 1987, Code of Practice for Heavy Motor Vehicle Towing Connections: Drawbar Trailers*, or

b) be replaced with a drawbeam that complies with *NZS 5446: 1987, Code of Practice for Heavy Motor Vehicle Towing Connections: Drawbar Trailers.*

16. A drawbeam, fitted to a vehicle before 1 March 2006, must comply with NZS 5446.

Couplings (section 4.6)

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

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

19. A hook, pin or ball-and-socket type coupling for towing a vehicle must comply with NZS 5446 unless it is a 50mm or 1?" ball fitted to a towbar to tow a light vehicle:

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.

Vehicle recovery service vehicles

21. A towing connection fitted to the rear of a vehicle recovery service vehicle for recovery purposes on or after 1 October 2005 must be designed and constructed in accordance with NZS 5446.

Page amended **4 November 2025** (see **amendment details**)