

Vehicle Standards Guide 9 (VSG-9)

Re-rating of Gross Vehicle Mass (GVM)

Revised July 2025

This guide provides advice to vehicle owners and modifiers on re-rating the GVM of heavy vehicles where the GVM is more than 4.5 tonnes before modification.

Introduction

Prior to commencement of the *Heavy Vehicle National Law* (HVNL), state and territory based requirements for re-rating a heavy vehicle's GVM varied. To address these variations, the NHVR has adopted a nationally consistent set of requirements for GVM re-ratings.

Re-ratings can result in an increase or a reduction to a vehicle's GVM and may be performed with or without physical modification. An Approved Vehicle Examiner (AVE) must perform and certify all GVM re-ratings in line with [Vehicle Standards Bulletin 6](#) (VSB6) Section S. VSB6 is the national standard for common modifications made to heavy vehicles. Any supporting modifications must also be performed and certified in line with VSB6.

Further information about heavy vehicle modifications can be found on the NHVR website at [Vehicle standards and modifications](#).

Getting approval for a GVM re-rating

Whenever the GVM of a vehicle is changed, the re-rating must be certified by an appropriately accredited AVE. The AVE must ensure the vehicle complies with all applicable requirements of the Australian Design Rules (ADRs), the HVNL and VSB6 at its revised GVM. Once satisfied the vehicle meets all requirements, the AVE must affix a modification plate and issue a modification certificate to certify the revised GVM.

Where the GVM re-rating requires modification of vehicle components, those modifications must be performed, assessed and certified in line with the relevant sections of VSB6. For example, the installation of additional or replacement chassis cross members must comply with Section H – Chassis, of VSB6.

Where the changes made to alter the vehicle's GVM also impact the vehicle's towing capabilities, the Gross Combination Mass (GCM) must also be approved and certified under Section S – Vehicle Rating, of VSB6.

Where a GVM re-rating is performed on a vehicle fitted with an advanced braking system, the certifying AVE must confirm that the advanced braking system continues to comply with the applicable standards.

Note:	An Advanced Braking System may be known as but not limited to one or more of the following: • Electric Stability Control (ESC) • Electric Stability Program (ESP) • Vehicle Stability Control (VSC) • Dynamic Stability Control (DSC) • Vehicle Stability Assist (VSA) • Roll Stability Control (RSC) • Roll Control System (RCS) • Electric Braking System (EBS) • Autonomous Emergency Braking (AEB)
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Most GVM re-ratings will require approval from either an appropriately accredited S1 AVE or both an appropriately accredited S1 and S2 AVE.

An appropriately accredited S1 AVE will:

- verify the vehicle has been modified in line with either the manufacturer's specifications or the S2 design certificate requirements
- affix a modification plate to the vehicle
- issue a modification certificate to the registered operator or owner.

Where required, an appropriately accredited S2 AVE will:

- assess the vehicle's GVM re-rating and issue a design certificate
- provide the S2 design certificate and checklist for supply to an appropriately accredited S1 AVE.

Note:	The S2 design certificate (including the S2 checklist) must detail the vehicle's revised GVM and the modifications required to configure the vehicle at the revised GVM.
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To help operators and owners of heavy vehicles determine when to engage an S1, or both an S1 and S2 AVE, a series of flowcharts have been produced and are available at the end of this guide.

Requirements for GVM increase or reduction

GVM increase or decrease to manufacturer's specification

Where a vehicle is from a model or range released with a number of GVM options, the vehicle's GVM can be re-rated to an optional GVM using the Modification Code S1, of VSB6.

In this situation, the vehicle must be configured to match the manufacturer's specification at the revised GVM and the modification must be approved by an appropriately accredited S1 AVE.

Re-rating the vehicle is not acceptable unless the vehicle's manufacturer has provided the specifications in writing and an AVE has certified the modification. The AVE must keep a copy of the manufacturer's certification for future reference.

Note: Written advice from a motor vehicle dealer is not acceptable. For more information about the types of evidence that are acceptable, refer to the Overview of [VSB6 Section S – Vehicle Rating](#).

GVM decrease not to manufacturer's specifications

The GVM of a vehicle can be decreased to a mass not specified by the manufacturer. The requirements for this re-rating can be broken into two categories:

1. Decrease that results in change of vehicle category or involves physical modifications

Where the re-rating of a vehicle's GVM results in the vehicle changing ADR category or involves physical modifications, the modification must be done in accordance with the S2 design certificate issued by an appropriately accredited S2 AVE.

Once issued, the vehicle must then be assessed by an appropriately accredited S1 AVE who will ensure the vehicle has been modified in line with the S2 design certificate, affix a modification plate and issue a modification certificate.

2. Decrease that does not involve physical modification and does not result in a change of vehicle category

Where the re-rating of a vehicle's GVM does not involve physical modification and does not result in the vehicle changing ADR category, the modification can be assessed by an appropriately accredited S1 AVE. The S1 AVE will ensure the vehicle is suitable for the revised GVM, affix a modification plate and issue a modification certificate.

GVM increase not to manufacturer's specification

The GVM of a vehicle can be increased to a mass not specified by the manufacturer, provided that physical modifications are carried out and it is done in line with the S2 design certificate issued by an appropriately accredited S2 AVE.

The increase of a vehicle's GVM, without physical modifications to a mass not specified by the manufacturer, is not permitted.

Once issued, the vehicle must then be assessed by an appropriately accredited S1 AVE who will ensure the vehicle has been modified in line with the S2 design certificate, affix a modification plate and issue a modification certificate.

Increasing the GVM of a light vehicle to more than 4.5 tonnes

Certification requirements for re-rating a light vehicle's GVM are set by state and territory transport authorities. To find out about the specific requirements, contact your local transport authority. This includes where a vehicle's GVM is re-rated to more than 4.5 tonnes.

Reduction in GVM of a heavy vehicle to 4.5 tonnes or less

Changes that result in the reduction of a heavy vehicle's GVM to less than 4.5 tonnes will also result in a change to the vehicle's ADR category (typically from NB2 to NB1). The S1 AVE is required to ensure the vehicle meets all applicable ADRs at the new category, including but not limited to, braking performance before the new GVM can be approved.

Administrative re-rating of 10,000lb vehicles

Where a vehicle has originated from the United States market and is rated at 10,000lbs (4,536kg) GVM, the GVM may be re-rated to 4,490kg without modification. An appropriately accredited S1 AVE must certify this re-rating in accordance with Section S1, of VSB 6. Certification of the GVM re-rating must only be performed after the vehicle has been provided to the consumer (formally known as supplied to market).

To determine if your vehicle has been provided, refer to the definition of "provide" in section 5(2) of the Road Vehicle Standards Act 2018 (RVSA).

If any physical modifications are required to support the revised re-rating it is no longer considered an administrative re-rating.

Note: The vehicle must comply with the applicable vehicle standards requirements at the revised vehicle category.

Requirements for GCM increase or reduction

This guide provides advice about re-rating a vehicle's GVM. For further information about re-rating a heavy vehicle's GCM, please contact an AVE accredited to certify modifications to either VSB6 Modification Code S1 (manufacturer's optional GCM) or S3 (any other GCM re-rating).

Registration and licensing

Vehicle registration

If a vehicle is modified in a way that impacts its registration, the state or territory transport authority may need to be notified. Common modifications may include changes to GVM, GCM, axle configuration and vehicle type (body truck, prime mover etc.).

For more information about vehicle registration, contact your state or territory transport authority.

Driver licensing

The class of licence needed to drive a vehicle depends on the vehicle's GVM and number of axles. When modifying a vehicle's GVM, make sure you are aware of the class of licence needed to drive it.

For more information about driver licensing, contact your state or territory transport authority.

Chain of Responsibility

The primary duty requires [Chain of Responsibility](#) parties to ensure, so far as is reasonably practicable, that they carry out their transport activities in a way that ensures public safety when heavy vehicles are used on a road.

Keeping up to date with vehicle standards and implementing them in your fleet is one part of your transport activities.

Complying with the national heavy vehicle safety standards

The operator of a heavy vehicle must ensure that their vehicle complies with the relevant *Australian Design Rules* (ADRs) and the *Heavy Vehicle (Vehicle Standards) National Regulation*. Using or permitting another person to use a defective heavy vehicle on a road is an offence.

A defective heavy vehicle is a vehicle that:

- does not comply with the heavy vehicle safety standards; or
- has a part that does not perform its intended function; or

- has deteriorated to an extent that it cannot be reasonably relied on to perform its intended function.

Penalties can include on-the-spot fines or prosecution. Formal warnings or a defect notice may also be issued. More information can be found at [Heavy vehicle defects | NHVR](#).

For more information:

Visit: www.nhvr.gov.au/vehiclestandards
 Subscribe: www.nhvr.gov.au/subscribe
 Email: vehiclestandards@nhvr.gov.au
 Phone: 13 NHVR (13 64 87)*

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AVE engagement determinations

