

Vehicle Standards Guide 9 (VSG-9)

Re-rating of Gross Vehicle Mass (GVM)

Revised June 2018

This guide provides advice to vehicle owners and vehicle modifiers about re-rating the GVM of heavy vehicles where the GVM before modification is more than 4,500kg.

Introduction

Prior to commencement of the *Heavy Vehicle National Law* (HVNL), state-based requirements for re-rating a 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 the most 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 www.nhvr.gov.au/vehicle-standards

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 requirements of the Australian Design Rules (ADRs), HVNL and VSB6 that apply to the vehicle at its revised GVM. Once the AVE is satisfied the vehicle meets all requirements, they must affix a modification plate and issue a modification certificate, certifying the revised GVM.

Where the GVM re-rating requires other vehicle components to be modified, these 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 be performed in line 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 Modification Code S3 of VSB6.

For the most part, GVM re-ratings will require approval from either an appropriately accredited S1 AVE or both an appropriately accredited S1 and appropriately accredited 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.

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 for 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 dealer is not acceptable.

For more information about the types of evidence that are acceptable, refer to the Overview of VSB6 Section S — Vehicle Ratings.

GVM decrease not to manufacturer's specification

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

Where the re-rating of a vehicle's GVM results in the vehicle changing ADR category, the modification must be done in line 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 result in change of vehicle category

Where the re-rating of a vehicle's GVM does not result in the vehicle changing ADR category, the modification can be assessed by an appropriately accredited S1 AVE who 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 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 vehicle's GVM to less than 4.5 tonnes 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 for 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 only after the vehicle has been supplied to market.

If any physical modifications are required to support the revised re-rating, an accredited S2 (GVM) AVE must issue a design certificate and the modification must be performed in line with Modification Code S1.

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 may depend 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.

Complying with the national heavy vehicle safety standards

The operator of a heavy vehicle must ensure their vehicle complies with the *Australian Design Rules (ADRs)* and *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 for a defective heavy vehicle can include on-the-spot fines or prosecution. Formal warnings or a defect notice may also be issued. For more information see the *Heavy vehicle defects—Compliance and enforcement bulletin* at www.nhvr.gov.au/ce-bulletins.

For more information:

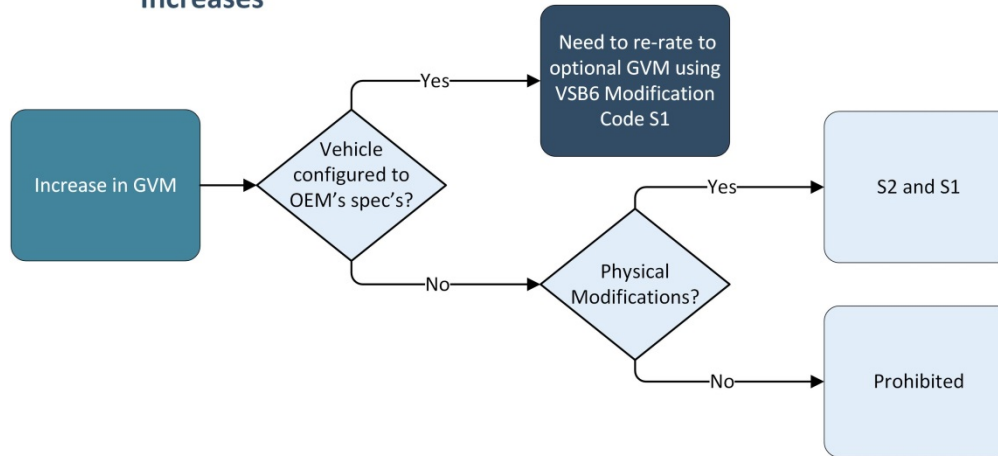
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AVE engagement determinations

Increases



Decreases

