

## Modifications to Heavy Vehicles

### (Update for Approved Vehicle Examiners in New South Wales)

#### Purpose

This guide provides advice to vehicle owners and modifiers in New South Wales (NSW) about modifications previously classed as “owner certified” that now require approval by an Approved Vehicle Examiner (AVE).

#### Introduction

Prior to commencement of the National Heavy Vehicle Regulator (NHVR), the requirements for which types of heavy vehicle modifications required approval in NSW was managed by the Roads and Maritime Service (RMS). Under the previous RMS scheme some modifications could be owner certified while others needed certification by an engineer.

As part of the commencement of the *Heavy Vehicle National Law*, the NHVR introduced a nationally consistent modification scheme with different rules about the types of modification that need certification from an AVE.

The following is a list of all modifications that previously were considered owner certified modifications in NSW and their revised certification requirement under the NHVR modification scheme:

Previous RMS requirements		Current NHVR requirement
Sub system	Modifications eligible for owner certification	
Brakes	Relocation of brake system air reservoirs and components (pre ADR35 only)	Certification by an AVE under code G1 of VSB6.
	Installation of trailer brake control systems on trucks and prime movers (pre ADR35 only)	Certification by an AVE under code G2 of VSB6.
Couplings	Installation of fifth wheel assemblies (pre ADR62 only)	Certification by an AVE under code P2 of VSB6.
	Installation of tow couplings (pre ADR62 only)	Certification by an AVE under code P1 of VSB6.
Structure and bodywork	Replacement of mudguards	Minor modification
	Installation of standard bodies, lighting and associated equipment	Certification by an AVE under code J1 of VSB6.
	Change of body, aftermarket body or body additions	Certification by an AVE under code J1 of VSB6.

Previous RMS requirements		Current NHVR requirement
Sub system	Modifications eligible for owner certification	
Structure and bodywork	Installation of truck mounted loading cranes – slewing crane.	Certification by an AVE under code Q1 of VSB6.
	Installation of truck mounted loading cranes – non-slewing crane.	Certification by an AVE under code R1 of VSB6.
	Installation of truck mounted loading cranes – wheelchair loader.	Certification by an AVE under code R2 of VSB6.
Lights and reflectors	Lighting that complies with the Australian Design Rules or <i>Heavy Vehicle (Vehicle Standards) National Regulation</i>	Minor modification
Seats and seatbelts	Fitting of seats and/or seat belts which were options available from the original manufacturer for the particular make/model.	Certification by an AVE under code K1 of VSB6.
	Fitting of anchorages which were options available from the original manufacturer for the particular make/model.	Certification by an AVE under code K2 of VSB6.
	Fitting of other interior vehicle fittings (which are likely to be contacted by occupants in a collision) which were options available from the original manufacturer for the particular make/model.	Modification not permitted.  The fitting of interior vehicle fittings which are NOT likely to be contacted by occupants in a collision and do not obstruct the drivers view are permitted and are a minor modification.
Mirrors	Replacement mirrors (where no ADR is affected)	Minor modification
Windscreen and windows	Tinting	Minor modification
Engine, driveline and exhaust	Replacement of engine (where no ADR is affected)	Certification by an AVE under code A1 of VSB6.
	Exhaust system modifications (pre ADR28 only)	Certification by an AVE under code A4 of VSB6.
	Fuel tank substitutions or additions (pre ADR17 only)	Certification by an AVE under code M1 of VSB6.

Previous RMS requirements		Current NHVR requirement
Sub system	Modifications eligible for owner certification	
Engine, driveline and exhaust	Engine substitutes (pre ADR30, 35 or 36 only)	Certification by an AVE under code A1 of VSB6.
	Installation of alternative transmissions (where ADR 65 is not affected)	Certification by an AVE under code B1 of VSB6.
LPG/CNG	Replace LPG/CNG container	Installation in accordance with NSW Gas Regulations.
Buses	Fitting of 'wig-wag' Lights	Minor modification
Trailers	Replacement of mudguards	Minor modification
General	Installation of speed limiting devices	Certification by an AVE under code A5 of VSB6.

## Minor modifications

Minor modifications are simple modifications, including the fitment of optional equipment or alterations to a vehicle within manufacturer's specifications, that do not cause the vehicle to be non-compliant with the ADRs or the *Heavy Vehicle (Vehicle Standards) National Regulation* (known as heavy vehicle safety standards).

Minor modifications do not require approval provided the vehicle continues to be within manufacturer's specifications and comply with the heavy vehicle safety standards. Examples of minor modifications include: additional lighting, aerials, air conditioning, alarm systems, plastic shields for lamps and windscreens, and manufacturer's wheel/tyre options (that do not affect the gross vehicle mass or gross combination mass rating of the vehicle).

## Modifications that require approval

Modifications that can affect the safety of a vehicle need to be assessed and approved, and can be split into two categories:

### 1. Modifications approved by an AVE

If a complex modification is included in the *NHVR Code of Practice for the Approval of Heavy Vehicle Modifications* (the Code) it can be assessed and approved by an AVE. The Code provides technical guidance on how the most common complex modifications must be performed to ensure the modified vehicle is safe and continues to comply with the heavy vehicle safety standards.

**Please note:** Previously AVEs in New South Wales were able to certify modifications that were not included in VSB6 under the modification code 'AOV' (all other vehicle modifications). The use of the 'AOV' code is not permitted by the Code and must not be used to certify any heavy vehicle.

### 2. Modifications approved by the NHVR

For more complex modifications that are not included in the Code, the modification requires approval from the NHVR.

More information about modifications to heavy vehicles is available from the NHVR's website at [www.nhvr.gov.au/hvmodifications](http://www.nhvr.gov.au/hvmodifications)

## Complying with the national heavy vehicle safety standards

It is an offence to modify a heavy vehicle in a way that does not meet the standards in the *NHVR Code of Practice for the Approval of Heavy Vehicles* or a modification approval issued by the NHVR. It is also an offence to use a modified heavy vehicle on a road if the modification has not been approved.

Penalties can include an on-the-spot fine and/or being issued with a defect notice.

### About the NHVR

The National Heavy Vehicle Regulator (NHVR) is Australia's dedicated independent regulator for heavy vehicles over 4.5 tonnes Gross Vehicle Mass.

The NHVR was created to administer one set of rules for heavy vehicles under the Heavy Vehicle National Law, improve safety and productivity, minimise the compliance burden on the heavy vehicle transport industry and reduce duplication and inconsistencies across state and territory borders.

The NHVR has a dedicated Vehicle Safety Standards team to help with modification applications and advise on any technical aspects.

#### For more information:

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\*Standard 1300 call charges apply. Please check with your phone provider

**Please note:** While every attempt has been made to ensure the accuracy of the content of this Vehicle Standards Guide, it should not be relied upon as legal advice.



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