

- **LOWERING OF GROSS VEHICLE MASS (GVM) RATING OF GOODS VEHICLES NOT EXCEEDING 4.5 TONNES GVM**
- **FITTING OF ALTERNATIVE RIMS AND TYRES TO TWO WHEEL DRIVE (2WD) LIGHT AND MEDIUM GOODS VEHICLES NOT EXCEEDING 4.5 TONNES GVM**

## Light Vehicles Policy

Number L 6.0

Issue Date 15 December 2005

Revision Date

### Intended audience

**Transport Inspectors:** Provides sufficient guidance to ensure familiarity with legislation and departmental policy relating to the lowering of GVM rating of goods vehicles with a GVM not exceeding 4.5 tonnes and the fitting of alternative rims and tyres to light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes.

**Queensland Police Service (QPS):** Provides sufficient guidance to ensure familiarity with legislation and departmental policy relating to the lowering of GVM rating of goods vehicles with a GVM not exceeding 4.5 tonnes and the fitting of alternative rims and tyres to light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes.

**Approved Inspection Stations (AIS):** Provides sufficient guidance to ensure familiarity with legislation and departmental policy relating to the lowering of GVM rating of goods vehicles with a GVM not exceeding 4.5 tonnes and the fitting of alternative rims and tyres to light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes to ensure vehicles comply with the requirements for the issue of a Safety Certificate.

**Approved Persons:** Provides sufficient guidance to ensure familiarity with legislation and departmental policy relating to the lowering of GVM rating of goods vehicles with a GVM not exceeding 4.5 tonnes and the fitting of alternative rims and tyres to light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes so as to ensure consistent certification of vehicles.

**Vehicle owner:** Provides guidance on vehicle compliance requirements.

### Applies to

**GVM de-rating** - Goods vehicles with a GVM not exceeding 4.5 tonnes

**Alternative rims and tyres** - Light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes.

### Objective

To ensure the modifications of goods vehicles with a GVM not exceeding 4.5 tonnes comply with Queensland vehicle standards requirements.

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**Background**

It has come to the attention of Queensland Transport (QT) that:

- goods vehicles with a GVM not exceeding 4.5 tonnes are being approved as having GVM downgrades;
- 2WD goods vehicles with a GVM less than 4.5 tonnes are being fitted with alternative rims and tyres; and
- vehicle's are being certified by Approved Persons utilising the "S" codes of the Code of Practice – Heavy Vehicle Modifications (VSB 6).

**Note:** For the purpose of this instruction:

- a light vehicle is defined as a motor vehicle with a GVM not exceeding 4.5 tonnes GVM;
- a heavy vehicle is defined as a motor vehicle with a GVM greater than 4.5 tonnes GVM.
- a light or medium goods vehicle is a goods vehicle with a GVM not exceeding 4.5 tonnes GVM; and
- a goods vehicle is a vehicle constructed primarily for the carriage of goods.
- 2WD refers to two wheel drive.

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**Legislation**

*Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 1999 - s 5.* Vehicles must comply with vehicle standards.

Lists when a vehicle is not in a condition for use on a road.

*Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 1999 - s 6* Modifying vehicle.

Lists when a vehicle is correctly modified for use on a road.

*Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 1999 - s 30* Approval of modified vehicle.

Lists owner's and Approved Person's responsibilities when modifying a vehicle for use on a road.

*Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 1999 - 1 Parts 7 and 8 (Division 2, Part 2, Schedule 1)* Australian Design Rules.

Requires compliance with applicable second and third edition ADRs respectively.

*Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 1999 - Section 44 (Division 1, Part 4, Schedule 1)* Alternative tyres, rims and wheels.

Grants exemption from Parts 7 and 8 for certain vehicles with regards to alternative rims and tyres.

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**Supporting documents**

Vehicle Standards Bulletin (VSB 6) – Heavy Vehicle Modifications.

"All About Modifications to Motor Vehicles" brochure.

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Queensland Transport's Approved Persons Handbooks for heavy and light vehicle modifications.

The Tyre and Rim Association of Australia Standards Manual.

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## Issue specifics

### **Gross Vehicle Mass re-rating**

The National Code of Practice (VSB 6) – Heavy Vehicle Modifications is based on accepted engineering practices and the requirements of the Australian Design Rules (ADRs) for Motor Vehicle Safety. The Code is intended to supplement the recommendations of the original vehicle manufacturer in relation to vehicle modification techniques or standards and to provide guidelines where manufacturer's standards do not exist.

VSB 6 - Section 4.1 (Scope – Application) advises that it applies to both new and in-service heavy vehicles. This section also indicates that it does not preclude the use of VSB 6 for other categories of vehicle, where appropriate.

QT's Approved Persons Handbooks for heavy and light vehicle modifications indicate that specific light vehicle categories can utilise a number of the heavy vehicle codes for modification purposes. The "S" codes are not listed in either handbook as permissible for light vehicle modifications and as such, the modification of light commercial vehicles utilising the "S" codes is not permitted.

As such, the lowering of the GVM rating of light vehicles with a GVM not exceeding 4.5 tonnes should not be carried out utilising the "S" codes of VSB 6.

Additionally, QT policy stipulates that:

**"A GVM cannot be downgraded without a physical change to the vehicle which does not compromise its safety. Replacement of the standard tyres with lower rated tyres to achieve a lower cost registration category is considered to compromise safety and is not permitted."**

As such, the lowering of a vehicle's GVM rating cannot occur without a physical change to the vehicle. However, where a lowering of GVM rating relates to a manufacturer's variant of a particular model of vehicle and a physical change does not occur between different models, the previous requirement does not apply.

Specifically, QT does not permit the lowering of GVM rating of light vehicles unless a manufacturer's lower GVM variant exists and the manufacturer's method of de-rating is used (see General Safety Concerns).

### **Alternative Rims and Tyres**

Rims and/or tyres of alternative sizes should only be fitted to motor vehicles that are passenger cars, passenger car derivatives or off-road passenger vehicles. There is no provision for fitting alternative rims and tyres to other vehicles, including light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes.

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The brochure "All About Modifications to Motor Vehicles" was updated in January 2005 to clarify that alternative rims and tyres have not been acceptable, and remain unacceptable, on light goods vehicles. This inclusion was to address the recent trend of owners illegally replacing rims and tyres on light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes.

The brochure is available for viewing on the QT website

### **General Safety Concerns**

QT is specifically concerned with any proposed lowering of GVM rating of light and medium goods 2WD vehicles with a GVM not exceeding 4.5 tonnes, designed for carrying heavier loads than passenger cars, by the fitting of lower rated passenger car rims and tyres. The possibility exists that vehicles de-rated in this way, could be mistakenly loaded to their previous capacity and thus exceed the rated capacity of the fitted rims and tyres, compromising the safety of the vehicle.

Also of concern is the possibility of vehicle category change and driver's licence issues associated with the de-rating.

It is proposed that the fitting of alternative rims and tyres to light and medium 2WD goods vehicles with a GVM not exceeding 4.5 tonnes will be investigated in line with alternative tyre and rim changes permitted for cars, car derivatives and off-road passenger cars under present legislation. Applications to fit alternative rims and tyres will not be considered until the investigation is complete and, if applicable, legislation changes made.

Note however, that the lowering of GVM ratings of goods vehicles with a GVM not exceeding 4.5 tonnes will not be considered as part of this review of alternative rims and tyres.

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### **Transport Inspector's action**

During the course of an inspection, where a Transport Inspector encounters a goods vehicle with a GVM not exceeding 4.5 tonnes that has undergone a GVM reduction or a light or medium 2WD goods vehicle with a GVM not exceeding 4.5 tonnes that has been modified by the fitting of alternative tyres and rims, they are to:

- Ensure that the vehicle complies with all requirements for the modification including those stated above.
- Issue a Defect Notice if modifications do not comply with requirements.

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### **QPS action**

During the course of an inspection, where a Queensland Police Officer encounters a goods vehicle with a GVM not exceeding 4.5 tonnes that has undergone a GVM reduction or a light or medium 2WD goods vehicle with a GVM not exceeding 4.5 tonnes that has been modified by the fitting of alternative tyres and rims, they are to:

- Ensure that the vehicle complies with all requirements for the modification including those stated above.
  - Issue a Defect Notice if modifications do not comply with the requirements.
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**AIS action**

Approved Examiners inspecting a goods vehicles with a GVM not exceeding 4.5 tonnes that has undergone a GVM reduction or a light or medium 2WD goods vehicle with a GVM not exceeding 4.5 tonnes that is modified by the fitting of alternative tyres and rims, are to:

- Ensure that the vehicle complies with all requirements for the modification including those stated above.
- Reject the vehicle if modifications do not comply with requirements.

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**Approved Person's action**

Where Approved Persons are asked to carry out modifications or certify an existing modification on a light or medium goods vehicles with a GVM not exceeding 4.5 tonnes that has undergone a GVM reduction, they are to:

- Ensure that the vehicle complies with all requirements for the modification including those stated above.

**Please note:** Any future requests for GVM reductions for light and medium goods vehicles with a GVM not exceeding 4.5 tonnes should be rejected.

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**Enquiries**

Regional Senior Transport Inspectors or Land Transport and Safety Division - Policy Advice Team on (07) 3253 4851.

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**Authorisation**

Issued by Business Manager (Policy Advice).

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