



GVM upgrades to light vehicles using Second Stage of Manufacture

FACTSHEET

Introduction

This fact sheet clarifies the requirements for certification of Gross Vehicle Mass (GVM) upgrades to light vehicles (less than 4.5 tonnes GVM) using the Second Stage of Manufacture (SSM) arrangements. SSM applications for more extensive works are managed on their merits.

Role of the Australian Government

The Australian Government Department of Infrastructure, Transport, Cities and Regional Development (the department) administers the *Motor Vehicle Standards Act 1989* (the Act). The Act requires a new road vehicle to comply with national vehicle standards known as the Australian Design Rules (ADRs), and to have an identification plate that confirms that the vehicle complies with the ADRs, before it can be supplied to the market for use in transport. The ADRs focus on performance and design requirements, leaving detail of design to prudent engineering practice by the Original Equipment Manufacturers (OEMs), which is based on extensive testing and expert experience.

An Identification Plate Approval (IPA) is issued under the Act when a road vehicle meets all the applicable ADRs. State/Territory registration authorities generally accept such an approval as evidence that vehicles covered by the approval meet all applicable ADRs. Under SSM arrangements, an IPA can also be issued where a new vehicle that meets all applicable ADRs undergoes further modifications, and the vehicle as modified also meets all applicable ADRs. Such an IPA is known as an SSM IPA.

The primary benefit of the SSM arrangements is that, in respect of ADRs not affected by SSM modifications, an applicant for an SSM IPA can demonstrate compliance by relying on the compliance of the original vehicle with the ADR (this is done practically on RVCS via using the first stage IPA as a Sub Assembly Registration Number).

However, where an SSM modification impacts compliance with an ADR, the SSM IPA holder is required to show that the vehicle as modified complies with the ADR, or with applicable concessional arrangements.

An SSM IPA holder for a GVM upgrade will have provided additional evidence showing that the vehicle as modified complies with relevant affected/impacted ADRs. Requirements around evidence are covered in section 4.1 of Administrator's circular 0-4-6.

Once a light vehicle has been supplied to the market for use in transport it is considered to be 'in-service' and matters such as registration, roadworthiness and combinations of vehicles (eg Gross Combination Mass, or GCM) are regulated by the applicable State/Territory authority.

Certification and light vehicle Gross Combination Mass Upgrade

There are no ADRs that require the GCM of a light vehicle (ie a vehicle less than 4.5 tonnes GVM) to be certified by testing or evidence provided by a manufacturer. Therefore, the Commonwealth does not assess, endorse or approve any purported change to a light vehicle's GCM specification by a second-stage manufacturer. State or Territory laws may impose requirements relating to changes to a vehicle's GCM specification.

Under the Act, an IPA (including an SSM IPA) authorises the holder to place an identification plate on vehicles of a particular type. An identification plate declares the status of a vehicle in relation to the ADRs. Neither the Act nor the ADRs confer any statutory entitlement on the holder of a SSM IPA to change a light vehicle's GCM for the purposes of any State or Territory law relating to vehicle GCM.

The Department recommends that second-stage manufacturers consult with relevant State or Territory government agencies before purporting to specify a different GCM than that specified by the OEM for a vehicle to ensure this is consistent with any applicable State or Territory laws.

What vehicle parameters can be modified under a GVM upgrade SSM IPA?

Gross Combination Mass: The department does not assess, endorse or approve GCM or purported changes to GCM for light vehicles as part of an Identification Plate Approval. Rather, it is up to State or Territory authorities to decide the circumstances in which a person can specify/modify a vehicle's GCM for the purposes of their legislation.

Gross Vehicle Mass: Yes, provided it does not exceed limits for axle loads or other parameters set by the OEM or if the vehicle has been extensively modified and evidence of compliance for all relevant ADRs is provided.

Rated Towing Capacity: Yes, if evidence of compliance with all relevant ADRs is provided including compliance of the vehicle structure. This would typically be for more extensively modified vehicles.

It is not appropriate for an SSM IPA holder to alter the OEM rating for a component or system without undertaking evaluation by testing to ensure the component is fit for purpose and complies with relevant ADRs.

Note: Some braking tests require additional consideration for unbraked trailer masses. SSM IPA holders should verify that an unbraked towing capacity is still accurate.

SSMs should note that although a Road Vehicle Descriptor (RVD) is submitted along with an application for IPA, the RVD is not part of an approval. Remarks in the

comments section of an RVD do not represent approval by the Department. Remarks seeking to endorse parameters will be required to be removed.

What ADRs are likely to be affected by modifications?

Potentially affected areas of compliance include (but are not limited to):

- Lighting
- Vehicle dimensions
- Noise
- Occupant protection
- General safety
- Brakes
- Wheels/Tyres
- Mechanical connections
- Emissions
- Definitions and vehicle categories

What should you do for a GCM upgrade?

The owner or vehicle modifier will need to talk with the applicable State/Territory registration authority to:

1. confirm that a GCM upgrade is available for the light vehicle in question, and
2. determine the requirements that need to be met allowing approval for the upgrade of the GCM.

Further information about GVM upgrade

If you have any questions about information in this fact sheet, please contact the Certification and RAWS Section of the Vehicle Safety Standards Branch in the Department of Infrastructure, Regional Development and Cities at lightvehicles@infrastructure.gov.au or by phone on (02) 6274 7766.