## Light Vehicle Construction and Modification GVM/GCM State by State Comparison

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	GVM	GVM	GCM Upgrade	GCM Upgrade	BTC, Braked
	Upgrades	Upgrades	to IN SERVICE	under SSM to	<b>Towing Capacity</b>
	of IN	under SSM to	vehicles	vehicles PRIOR	to IN SERVICE
STATE	SERVICE	vehicles PRIOR	(currently	to initial	Vehicles
	vehicles	to initial	registered	registration	
	(currently	registration	vehicles)		
	registered				
	vehicles)				
Queensland	Approved	Approved	Not Approved	Approved***	
NSW	Approved	Approved	Approved	Approved	Approved**
South Australia	Approved	Approved	Approved	Approved	Approved**
Victoria	Approved	Approved	Approved	Approved	Approved**
Western Australia	Approved	Approved	Not Approved	Approved*	Not Approved**
ACT	Approved	Approved	Not Approved	Approved*	Not Approved**
Northern Territory	Approved	Approved	Not Approved	Approved*	Not Approved**
Tasmania	Approved	Approved	Approved	Approved	Approved**

<sup>\*</sup> A vehicle that is legally registered in one Australian state of Territory with a BTC, GVM or GCM upgrade, can legally travel in another state or Territory.

"The towing capacity of a light vehicle expressed as Gross Combination Mass (GCM) rating or Rated Towing Capacity or Maximum Braked Towing Mass rating must not exceed the value set by the first stage manufacturer. Second stage manufacturers are not permitted to increase the towing capacity as part of an SSM IPA that results in GVM upgrade," it stated in Section 10.6, of the 0-4-6 circular issued in June 2018

Source: DMW Industries

## **Definitions:**

**Light Vehicle**: A light vehicle means a motor vehicle with a Gross Vehicle Mass of 4.5 tonnes or less.

Gross Vehicle Mass "GVM": Weight transmitted by all tow vehicle axles to the ground

Front Axle Capacity "FAC": Weight on tow vehicle front axle

Rear Axle Capacity "RAC": Weight on tow vehicle rear axle

Towbar Down Force "TDF": Weight transmitted from trailer to vehicle towbar

**Gross Combination/Combined Mass Definition:** The Gross Combination/Combined Mass, GCM, is defined as follows GCM = GVM – TDF + ATM. In simple terms it is the sum of all vehicle and trailer axle loads transmitted to the ground. The GCM CANNOT BE EXCEEDED.

Aggregate Trailer Mass "ATM": Trailer mass including tow ball down force on tow vehicle

**Second Stage of Manufacture "SSM":** Second stage of manufacture (SSM) is when a base vehicle is modified to become an alternative vehicle. The base vehicle must have an RVS approval, be entered on the Register of Approved Vehicles (RAV) and be still a new vehicle, not been provided to the Australian market.

<sup>\*\*</sup> Please note that as of the Administrator Circular released in June 2018 BTC upgrades are not permitted on light vehicles. Please see exert below.

<sup>\*\*\*</sup>STILL AN IN SERVICE DECISION SO NO GCM UPGRADE. \*2023 update. LS16 code passed for GCM but significant testing to be done before any approvals. SSM not a basis for approval.

## Plain Talk:

A pre-registered new light vehicle can be modified under Federal approval through SSM process and will compliant in all states and territories.

A post-registered light vehicle can be modified using Federal compliance data in conjunction with a vehicle inspection by an authorised State engineer for certification purposes.

All pre and post registered modified light vehicles are legal in all states and territories of Australia but if a post registered modified light vehicle is sold in a state other than where its post registration modification was certified, will be subject to recertification in the state of sale.

## **References:**

<u>National:</u> Vehicle Standards Bulletin 14 (VSB 14) (Vehicle Standards Bulletin 14 (VSB 14) | www.infrastructure.gov.au/infrastructure-transport-vehicles/vehicles/vehicle-design-regulation/rvs/bulletins/ncop)

Circular 0-4-6, Issue 4, June 2018 Section 10.6 (Administrative Circular 0-4-6 (4wdcouncil.com.au))

**Queensland**: Queensland Code of Practice: Vehicle Modifications (QCOP) Code LH14: Light Vehicle Modifications for Chassis Alteration (Modification Certification) (Vehicle modification codes (Department of Transport and Main Roads) (tmr.qld.gov.au))

LS16 Gross Combination Mass Re-rating (https://www.publications.qld.gov.au/dataset/58da77ae-5764-414a-864a-b72b2bbb1563/resource/cc94c072-96d8-4b67-a3b2-0aa9433aea4f/download/ls16-gross-combination-mass-re-rating.pdf)

**Western Australia:** Information Bulletin IB-134 Light Vehicle Modification Standards (<u>IB-134 Light</u> Vehicle Modification Standards (Information Bulletin) (transport.wa.gov.au))

**NSW:** Vehicle Standards Information VSI.06 | Rev. 3 | 8 November 2013 (<u>VSI No.6 Light vehicle modifications Rev 3 November 2013 (nsw.gov.au)</u>)

**Tasmania:** Special Information Bulletin 01-2017 Design approval January 2017 (<u>Microsoft Word - SIB01-2017-Design approval (transport.tas.gov.au)</u>)

**Northern Territory:** V32 (Iv) Light vehicle modifications – not more than 4.5t Gross Vehicle Mass (V32(Iv) Light vehicle modifications - not more than 4.5t gross vehicle mass (nt.gov.au))

**South Australia:** Vehicle Standards Fact Sheet MR1457 October 2020 (<u>SA.GOV.AU - Light vehicle mass re-rating (www.sa.gov.au)</u>)

ACT: Vehicle Standards Bulletin 14 (VSB 14) (Modified light vehicles - Access Canberra (act.gov.au))