

There has been some confusion about the size and weight of a caravan that a vehicle can legally tow.

The regulations have changed many times over many years. At one stage it was simply that the tow vehicle had to be heavier than the caravan.

Today, the regulations are much more stringent and complex taking in many factors.

Understanding these regulations and the associated weight calculations is often not understood, and the acronyms used can be confusing.

In the interest of safety of all motorists, the CCQ encourages all caravanners to familiarise themselves with these regulations and take adequate steps to ensure their tow vehicle and caravan combination weights do not exceed the maximum legal weights.

Vehicle and caravan manufacturers will specify Tare, Payload, GVM, GTM, ATM and GCM. These weight figures may be in the owner's handbook or etched on a plate attached to the vehicle or caravan.

Using the form provided; enter the maximum weights as specified by the 'Manufacturers' for your combination. These weights must not be exceeded under any circumstances

Knowing the maximum legal weights for your combination; take your tow vehicle and caravan - all loaded up, including full fuel and water tanks, and ready to tour – to a registered public weighbridge and have it weighed.

Hopefully you are under the legal weight limits, if not make all necessary weight reductions and reweigh your combination.

Again, using the form provided; enter the final measured weights of your combination for future reference.

Then you can be confident that your tow vehicle and caravan combination measure up when it comes to legal safe towing.

For a further detailed explanation please visit

www.caravanlifestyle.com/caravan-weight-breakdown/

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	My Tow Vehicle and Caravan				Registration Nos.	Vehicle –	Caravan –	Dated –
	Max Specified Weights		Weights as Measured					
	Large SUV	8.0 m Caravan	Vehicle	Caravan				
Tare Mass	2520	3000						
Payload	740	500						
GVM – Gross Vehicle Mass	3260							
TBM - Tow Ball Mass		350						
GTM – Gross Trailer Mass		3150						
ATM – Aggregate Trailer Mass		3500						
GCM – Gross Combination Mass	6410							



The State Association for Queensland Caravan Clubs

ccqsecretary@gmail.com

www.caravanclubsqld.org.au

Understanding Tow Vehicle and Caravan Weights

*Achieving excellence in caravanning
for the benefit of affiliated clubs and
their members*

Tare Mass



TARE MASS - mass of a vehicle ready for service, unoccupied and unladen, with all fluid reservoirs filled to nominal capacity except for fuel, which shall be 10 litres only, and with all standard equipment and any options fitted.

Payload



PAYLOAD - the maximum allowable load carrying capacity of the tow vehicle or caravan as specified by the 'Manufacturers'.

The 'Payload' is equal to the ATM – Tare Mass.

- Tow vehicle payload includes passengers, luggage, aftermarket accessories and *Tow Ball Mass*.
- Caravan payload includes food, personal items, water, gas, aftermarket accessories and all other equipment

Gross Vehicle Mass - GVM



GROSS VEHICLE MASS (GVM) - the maximum laden mass, including the payload, of a motor vehicle as specified by the 'Manufacturer'.

Tow Ball Mass - TBM



Tow Ball Mass (TBM) - the weight imposed on the tow vehicle's tow ball by the coupling of a laden caravan.

The TBM = ATM - GTM

Gross Trailer Mass – GTM



GROSS TRAILER MASS (GTM) - the mass transmitted to the ground by the 'Axle' or 'Axles' of the trailer when coupled to a tow vehicle and carrying its maximum load.
The GTM = ATM - TBM

Aggregate Trailer Mass – ATM



AGGREGATE TRAILER MASS (ATM) - the total mass, including the payload, of the laden trailer when carrying the maximum load recommended by the 'Manufacturer'. This will include any mass imposed onto the drawing vehicle when the 'Combination Vehicle' is resting on a horizontal supporting plane.

Gross Combination Mass – GCM



GROSS COMBINATION MASS (GCM) - value specified for the vehicle by the 'Manufacturer' as being the maximum of the sum of the 'Gross Vehicle Mass' of the drawing vehicle plus the sum of the 'Gross Trailer Mass' ('Axle Loads') of any vehicle capable of being drawn as a trailer.
The GCM = GVM + GTM

Free Caravan Safety Check Program

(including vehicle and caravan weights)
courtesy of Caravanning Queensland.

<http://www.caravanqld.com.au/showsevents/free-caravan-safety-checks.aspx>

NOTES:

- The weighbridge is represented by the solid red lines under the tow vehicle and caravan wheels in the images
- The allowable Payload, TBM, GVM, ATM, GTM and GCM weights must not be exceeded under any circumstances.
- Exceeding any of the above weights may affect safety, insurance and warranty and may incur penalties.
- These regulations apply to all forms of trailers
- Different regulations apply to fifth-wheeler caravans and trailers
- The ATM and TBM weights must not exceed the rating of the vehicle tow bar and shank
- The TBM is generally accepted to be approximately 10% of the ATM of the caravan
- References: -
 - *THE NATIONAL CARAVAN AND RECREATIONAL VEHICLE TOWING GUIDE*
 - *CARAVAN LIFESTYLE*

Disclaimer

The Caravan Clubs of Queensland Inc (CCQ) has presented the information contained in this document in a format that is simple to read and understand.

The information is provided as an information source for the benefit of all motorists who intend to tow any form of trailer.

The CCQ has compiled the Information from various sources, all of which can be freely found on the internet.

The CCQ does not accept liability to any persons for the accuracy or completeness of the information.

If in doubt about your understanding or the weights of your combination seek further advice or have your combination weighed on a registered weighbridge.