

# CAR WEIGHT & TOWING WEIGHT

✓ **CAR WEIGHT AND TOWING WEIGHT**

✓ **LEGAL REQUIREMENTS**

## YOUR GUIDE TO THE TOW VEHICLE WEIGHTS

If you are going to purchase a trailer or caravan, it is critical that you give careful consideration to your vehicle's towing capacities, your caravans weight capacities and what you plan to do on your travelling journeys prior to making your purchase.

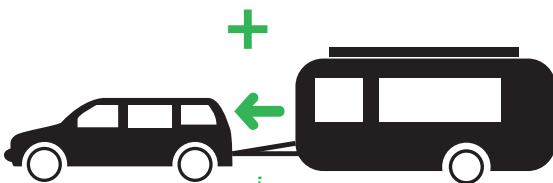
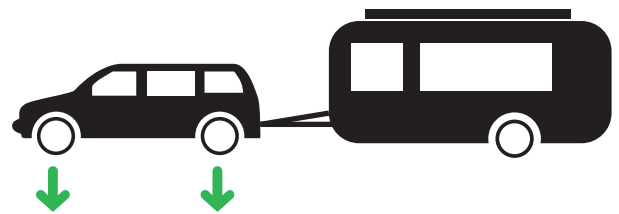
The first fundamental to caravanning is caravan weights as there are legal requirements about the weight capacity of your towing vehicle, your caravan or RV and these two combined. Getting these weights right will make your tow setup safe and legal. The relevant information can be found on the caravan's vehicle plate and in your tow vehicle's handbook.

## CAR WEIGHT AND TOWING WEIGHT

### GROSS VEHICLE MASS (GVM)

The GVM is the maximum allowable total mass of a fully loaded motor vehicle as specified by the original manufacturer, consisting of the tare mass (mass of the vehicle) plus the load (including passengers).

The GVM is also calculated when the loaded caravan is attached to the towball of the car. This is important as the weight applied to the car from the caravan will affect the capacity of the tow vehicle axles.



### TOWING CAPACITY

Maximum load that the tow vehicle can tow legally. Consumers will need to check the tow vehicle capacity and the tow bar capacity. The lesser is the maximum towing capacity.

#### Note:

- The maximum for an unbraked caravan is much lower than for a braked caravan.



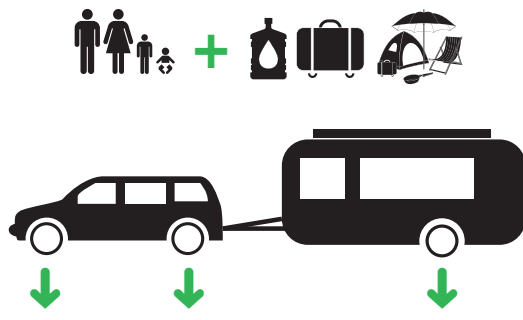
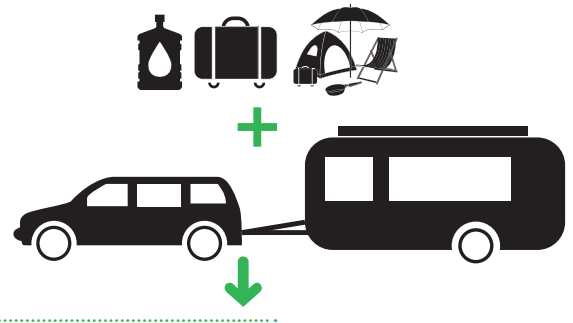
*Go make some memories*

[gomakesomememories.com.au](http://gomakesomememories.com.au)

© Caravan Industry Victoria, 2018

## TOW BALL WEIGHT (TOW BALL LOADING)

Maximum load (or force) permitted on the tow ball of the vehicle, which must also not exceed the rated capacity of the towbar itself. Consumers will need to check the tow vehicle capacity and the tow bar capacity. The lesser is the maximum towing capacity. Sometimes the original caravan manufacturer will specify a maximum load (or force) that can be exerted on the towball at any time.



## GROSS COMBINATION MASS (GCM) RATING

This rating is provided by the tow vehicle manufacturer. The GCM is the maximum sum of the laden mass of a motor vehicle (GVM) plus the maximum laden weight of an attached caravan (GTM) with all the customer belongings and passengers, this rating is not permitted to be exceeded.

### Note:

- In some circumstances, the GCM is actually less than the GVM and the towing capacity calculated together.

# LEGAL REQUIREMENTS

**MAXIMUM TRAILER MASS** - Throughout Australia, the allowable maximum mass for the caravan is either the capacity of the tow vehicle's towing attachment (towbar) or the towing capacity specified by the vehicle manufacturer for the towing vehicle. Additionally, the original caravan manufacturer will state an ATM and/or a GTM (refer to the definitions as ATM and GTM vary). These also must not be exceeded.

Therefore, whichever weight capacity is the least is the maximum allowable mass for the caravan.

**MAXIMUM TOW BALL MASS** - Throughout Australia, the allowable maximum mass for the trailer is either the capacity of the tow vehicle's towing attachment (towbar tow ball capacity) or the towing vehicle tow ball capacity specified by the vehicle manufacturer for the towing vehicle, whichever is the least. Additionally, the original caravan manufacturer may state a maximum tow ball mass.

Therefore, whichever weight capacity is the least is the maximum trailer mass.

### Where the tow vehicle manufacturer does not specify towing mass data, the vehicle may legally tow:

- A loaded trailer with brakes - up to 1.5 times the unladen mass of the vehicle; OR
- A loaded trailer without brakes - not exceeding the unladen mass of the vehicle.

Also, where the vehicle manufacturer specifies a maximum tow ball mass, this must be adhered to. When no maximum ball mass is specified, the vehicle's maximum rear axle load rating will be the limiting ball load factor.

Not exceeding the vehicle's Gross Combination Mass (GCM) and not towing a trailer that cannot be safely controlled by the towing vehicle and its driver must also be considered.

### Note:

- All trailers with a GTM exceeding 750kgs must have brakes.
- All trailers up to 2 tonnes GTM, an efficient braking system is considered to have brakes operating on the wheels of at least one axle. Over-run brakes may only be used on trailers that do not exceed 2 tonnes GTM.
- Every trailer over 2 tonnes GTM must have brakes operating on all wheels. The brake system must cause immediate application of the trailer brakes in the event of the trailer becoming detached from the towing vehicle. Under these circumstances, the brakes must remain applied for at least 15 minutes.