

CARAVAN WEIGHTS

✓ CARAVAN AND RV WEIGHTS

✓ LEGAL REQUIREMENTS

YOUR GUIDE TO CARAVAN 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 capacities can be found on the caravan's vehicle plate and in your tow vehicle's handbook.

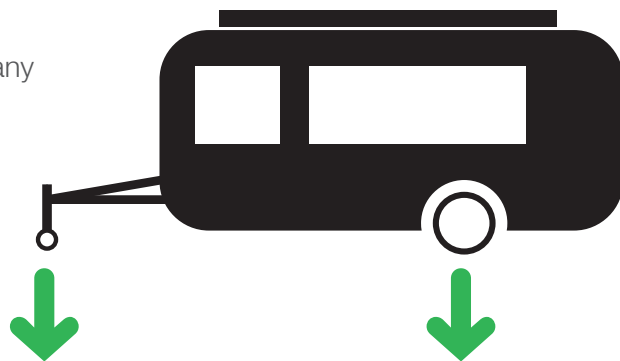
CARAVAN AND RV WEIGHTS

TARE MASS (TARE)

Common industry practice for tare mass is specified by the original caravan manufacturer for the total weight of the caravan (load on tyres as well as load on the tow ball). The Australian Design Rule states the tare mass is when the vehicle is ready for service and therefore consumers should check with the dealer/retailer if items have been added after the original manufacturer that will vary the weight. Tare Mass is unoccupied, unladen and with all options and fittings as supplied by the original manufacturer at the time of manufacture, with empty water tanks, no empty gas bottles, and no fluids not essential for operation on public roads, and without luggage or personal effects. Also known as 'Dry Weight' or 'Empty Weight'.

Note:

- This weight does not and will not include any aftermarket items fitted after the original manufacturer of the product.



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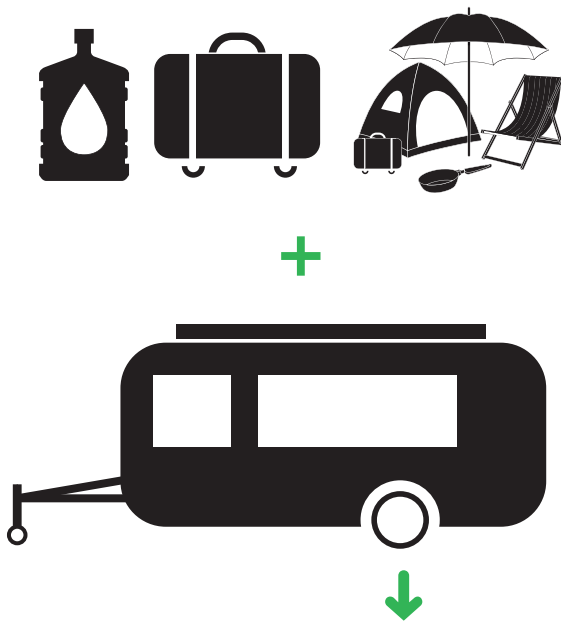
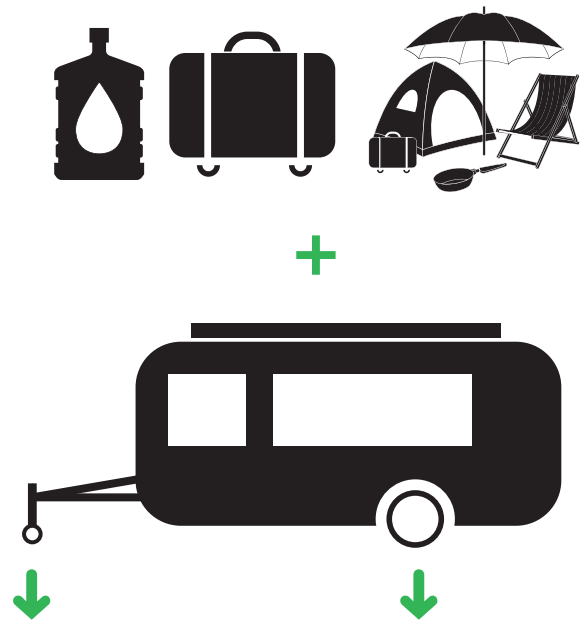
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AGGREGATE TRAILER MASS (ATM)

Total maximum permitted mass of the caravan (load on tyres as well as the tow ball load) when carrying its maximum payload, including fluids, luggage and personal effects. The ATM is the maximum rating specified by the original caravan manufacturer and must not be exceeded.

Notes:

- This is a rating for the caravan, the actual weight of the caravan will vary at any time depending on the payload applied.
- This weight does and will not include any aftermarket items fitted after the original manufacturer of the product.
- Depending on the way the caravan is loaded will alter weight of the caravan weight at any time particularly the Tow Ball Weight and may also exceed the ATM and/or GTM.



GROSS TRAILER MASS (GTM)

The maximum mass that can be transmitted to the ground by the 'Axle' or 'Axles' of the caravan when coupled to a drawing vehicle (does not include tow ball load) and when carrying maximum payload including fluids, luggage and personal effects.

If the GTM is specified by the original caravan manufacturer this is the maximum rating and must not be exceeded.

Notes:

- This is a rating for the caravan, the actual weight of the caravan will vary at any time depending on the payload applied.
- This weight does not and will not include any aftermarket items fitted after the original manufacturer of the product.
- Depending on the way the caravan is loaded will alter weight of the caravan weight at any time particularly the Tow Ball Weight and may also exceed the ATM and/or GTM.

LOAD CARRYING CAPACITY (PAYLOAD)

The maximum load specified by the original caravan manufacturer permitted for the customer (owner of the caravan) for their belongings and items in the caravan including fluids (water, gas etc.), luggage, personal effects and any after-market fittings/equipment.

The allowable payload may be worked out by deducting the "Tare Mass" from the "ATM", be mindful any aftermarket items will affect the TARE of the caravan. The payload must not be exceeded under any circumstances, otherwise the ATM and/or GTM may be exceeded.

Notes:

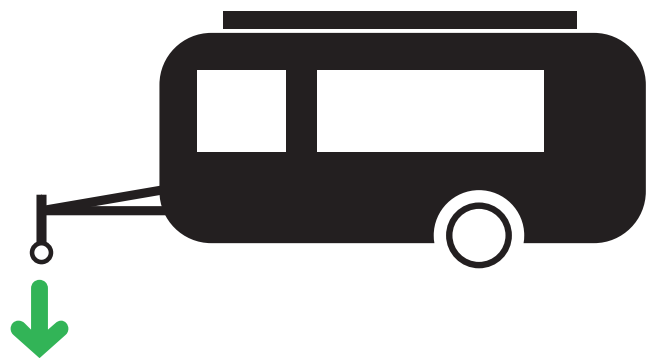
- If any equipment, any after-market fittings/equipment, is added after the original manufacture, actual TARE of the caravan will be more than the TARE specified on the vehicle plate, and the payload will be reduced accordingly as ATM and/or GTM are ratings (see ATM and GTM definitions) and must not be exceeded.
- Depending on the way the caravan is loaded will alter weight of the caravan weight at any time particularly the Tow Ball Weight and may also exceed the ATM and/or GTM.



TOW BALL WEIGHT (TOW BALL LOAD AT TARE)

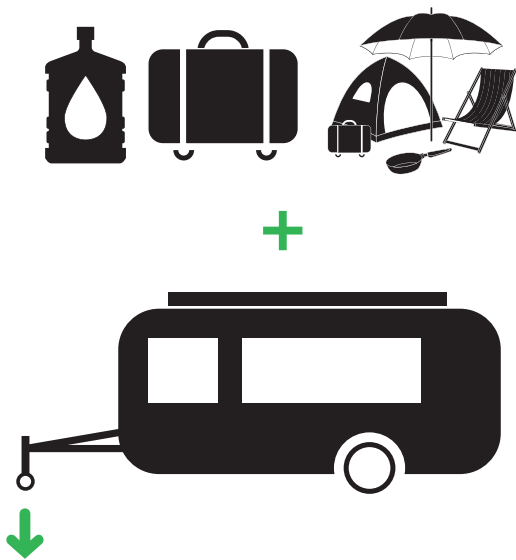
Actual load (or force) is stated by the original caravan manufacturer on the vehicle plate, is then exerted on the towbar when the trailer is at TARE.

When any fluids, luggage and personal effects or after-market fittings/equipment are added, the tow ball load will vary from tow ball at TARE specified on the vehicle plate.



Note:

- When travelling and loading your caravan, it's important to check your tow ball weight of your caravan to ensure it does not exceed the car tow ball mass, as depending on how the caravan is loaded will affect the tow ball weight.



MAXIMUM TOW BALL WEIGHT (MAX BALL LOADING)

Sometimes the original caravan manufacturer will specify a maximum load (or force) that can be exerted on the towball at any time. This load (or force) must not be exceeded when loading or towing the caravan.

Note:

- This is not the car tow ball mass capacity, therefore that capacity must not be exceeded also.

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.