

Safe and Legal Towing

Nationally accepted trailer towing regulations have made it easier for owners to comply with the legalities of towing, but there's much that's not covered by legislation.

Since 1989, when the Australian States and Territories agreed on common national towing regulations, the starting point for 4x4 owners wanting to tow trailers has been relatively easy to understand.

The national position is that a passenger vehicle, light commercial vehicle or a 4x4 with a GVM of less than 4.5 tonnes can tow a trailer with an ATM that weighs the lesser of the tow vehicle manufacturer's recommended maximum trailer towing mass (including the tow ball load), or the tow vehicle's tow bar rating (including the tow ball load). Clear? It becomes clearer if we look at the GVM and ATM acronyms.



Legal Weights

Any vehicle operated in excess of its rated GVM or GTM is illegal and the driver faces heavy fines and, in the event of an accident, cancellation of insurance.

Gross vehicle mass (GVM) is a rating given to the 4x4 by its manufacturer and is the maximum the vehicle can weigh. Modified vehicles may have a higher GVM rating than originally provided, but this is granted by State and Territory registration authorities only upon presentation of an accredited engineer's certificate.

Gross trailer mass (GTM) is the maximum permitted weight imposed on the trailer's suspension, wheels and tyres, when coupled to a towing vehicle.

Aggregate trailer mass (ATM) is the total weight of trailer, including the tow ball weight imposed on the towing vehicle.

Factors that can influence GVM and GTM include changes to wheels and tyres on 4x4 and trailer. Tyres with lower load ratings than the originals effectively reduce the plated GVM and GTM.



Inoperative trailer brakes also reduce GTM, from the trailer maker's figure back to 750kg, which is the upper figure allowed for unbraked trailers.

GVM is the total weight of the 4x4 and its contents: fuel, water, people, cargo, accessories and spares – everything. In the case of a towing vehicle coupled to a trailer the GVM figure also includes the tow ball weight imposed by the trailer.

When you consider that most 4x4 wagons have a payload figure of between 450kg and 750kg it's easy to see why many 4x4s towing heavy trailers exceed the manufacturers' GVM ratings. Any vehicle operated in excess of its rated GVM or GTM is illegal and the driver faces heavy fines and, in the event of an accident, cancellation of insurance.

All tow bars made after July 1, 1988 should have a plate that lists the maximum load, the maximum tow ball load and the make and model of vehicle the bar was designed for.

The vehicle's towing rating remains the maximum the vehicle can legally tow, even if the tow bar is rated for a higher load. However, if any of the tow bar specifications are lower than those of the vehicle, the tow bar limits the load that can be towed.

It is common to find tow bar ratings that differ from those of the vehicle, most often where the bar is made for a number of different models in the range, or where light and heavy duty tow bars are offered.

Among all these very precise guidelines is one major variable: tow ball load. There's a convention that sets tow ball load at around 10 percent of the trailer ATM, but this rule of thumb developed in the days of small trailers. It's still the practice by many North American and Australian trailer makers to specify 10 percent loadings for heavy trailers, but in Europe, where there has been considerable testing done, the tow ball load range is specified in EC E94/20 regulation as a minimum figure of 25kg and a maximum of 100kg, for trailers up to 2000kg ATM. Even above that figure the heaviest gazetted coupling for cars, light commercials and 4x4s is rated at 120kg tow ball load.

It's easy to check the tow ball weight of a disconnected trailer by sliding a set of bathroom scales under the trailer coupling, using a block of wood between the scales and the underside of the coupling. It's important that this measurement be done at the height of the tow ball.

Safety Chains

All States and Territories require the use of safety chains. Safety chains must be strong enough to hold the trailer should the trailer coupling disconnect and must comply with the appropriate Australian Standard.

Trailers up to 2500kg ATM are required to have one safety chain and trailers from 2500kg to 3500kg must be fitted with two safety chains.

The shackle used to connect a safety chain to a vehicle's tow bar must have a load rating equivalent to that of the safety chain. Safety chains must attach to the main frame of the tow bar, not to a removable part such as the tow bar tongue.

Legal Dimensions

It's unlikely that most 4x4 owners will run foul of the maximum legal dimensions for a 4x4 and trailer combination – 19 metres overall and 4.3m high - but there are some internal dimensional restrictions that need noting.

The distance from the tow ball to the axle centre line (or the centre of a group of two or more axles) must not exceed 8.5m and the rear overhang, including any attachments to the trailer, must not exceed 3.7m.





The overall width of the trailer and any attachments must not exceed 2.5m, unless a permit has been granted by the State or Territory authority. Note that permits allowing legal travel in one jurisdiction will not be legal in another State or Territory.

In addition to these nationally accepted dimension limits there are local exemptions, such as a special 5m rear overhang allowance for trailerable yacht masts in Victoria. Always check with local authorities to find out what rules may apply to your 4x4 and combination.

Trailer Brakes

The nationally approved upper limit for unbraked trailers is a GTM rating of 750kg.

Trailers not over 2000kg GTM must have brakes that operate on at least one axle. Trailers over 2000kg GTM must have brakes on all wheels.

Trailers over 2000kg GTM are required to have brakes that apply if the trailer becomes detached from the towing vehicle.

Brakes other than override systems must be able to be operated from the driver's seat.

When assessing if a proposed trailer requires brakes you need to check the weight on the trailer tyres, with the trailer loaded with its normal equipment, as it will be towed.



Jost has built an enviable reputation in the heavy road transport sector and has now released a range of light and medium trailer landing legs.

The new Jost legs have capacities from 800kg up to 4500kg and are designed for ease of fitment and operation. The cylindrical model uses top action and comes with a swivel bracket that allows for easy folding, or removal and stowing when not required.

JOCKEY WHEEL



Also part of the Jost trailer handling range is a premium quality, marine-grade jockey wheel.

The top-action tube is fitted with a grease nipple and integral swivel bracket. The wheel is of no-maintenance composite construction. Backing plates and mounting bolts are included.



Capacity
800 KG

LANDING LEGS



Capacity
3300 KG



Capacity
4500 KG

[Click here to visit our website
www.jostaustralia.com.au](http://www.jostaustralia.com.au)

Speed Limits

The speed limit when towing is generally the posted speed limit, however in Western Australia the maximum speed for trailers over 750kg GTM is 100km/h.

If you can travel at lower than the legal maximum you and the trailer will have an easier time. You'll reduce stress and fuel consumption.

It's important to realize that when towing, your vehicle is heavier and will be harder to start off, accelerate and stop, so you will need to drive accordingly.

However, use polite road etiquette and allow faster vehicles – particularly trucks – to get by when possible.

