



4WDs are extremely popular for towing with throughout Australia, and for good reason. Whether you are towing a caravan or camper trailer around this great country or just moving some horses down the road in a horse float, using a 4WD is a good start. 4WDs are heavier, have better-towing capacities and will handle towing a trailer much easier than your average 2WD vehicle.

However, there's a lot to know about towing safely and correctly and sadly many people are not aware of this at all. Every week there are nasty accidents with 4WDs towing trailers, and there are a lot of things that contribute to it all going wrong. In this post, we are going to look at everything you need to know to safely tow with a 4WD.



*Towing our camper trailer off-road.*

## Know your weights

The first and most overlooked part of towing with your 4WD is to know your weight limits. This is a huge topic in itself and requires a lot of explanation, but I'll keep it brief for now. You are required by law to stay within the manufacturer's engineering limitations for both your 4WD and trailer and then in combination.

Whilst this probably won't apply if you are towing a box trailer to the tip, however, if you're towing anything more than 750kg you'll want to do some more research. The best thing to do is to take your vehicle and trailer in its loaded state down to a weighbridge (find your nearest one [here](#)) and get some figures.

From there, read through your owner's manual and make sure you comply with the weight requirements for your 4WD, trailer and total weight.



*Exploring the southwest with trailers and boats in tow.*

## You need to be under the following weights:

**GVM:** The maximum weight your 4WD can weigh when loaded up. This includes your tow ball weight imposed by the trailer, along with all the accessories you fit, extra fuel, passengers and gear inside the vehicle. It is extremely easy to go over your GVM. You can get the weight of your vehicle by driving onto the weighbridge with the trailer attached, but leave the trailer off the weighbridge.

**GCM:** The maximum weight your 4WD and trailer in combination can weigh, while travelling down the road. Literally, just drive onto the weighbridge with your trailer on and take the total weight down.



*Travelling around Australia, towing a caravan.*

**Axle weights:** Beyond the GVM, your vehicle needs to be loaded evenly. You can't put all of the load at the back of your 4WD or you risk damaging the rear axle and chassis. Your owner's manual should tell you the maximum axle weights, or you can ring the manufacturer and get it from them. You can weigh axles individually by just having the axle you want to weigh on the weighbridge.

**Trailer ATM:** Your trailer has an aggregate tare mass. This is the maximum weight it can be. You'll find the ATM on a nameplate at the front of your drawbar. Many trailers do not have



the ability to carry much weight (especially caravans) and by the time you add water into the tanks, fill the LPG bottles and throw your gear in its overweight. Simply drive the trailer onto the weighbridge and unhook to get the trailer's weight.

It is always best to avoid towing a trailer that weighs more than your 4WD.



*Is your vehicle suitable for the trailer?*

## **Tow ball weight**

Every 4WD comes with a maximum tow ball weight. This is either limited by the manufacturer (in your owner's manual) or by the towbar itself. This will range from 100 - 400kg depending on the 4WD. You can get the tow ball weight on a weighbridge fairly easily by doing some maths.

## **Towing capacity**

Like your tow ball weight, every vehicle comes with towing capacity. For most new 4WDs it's 3500kg, but there are a lot of 4WDs which have lower capacities. Make sure your trailer doesn't weigh more than this or you will have a problem.



*Broken trailer at Kakadu.*

## **How's the trailer balanced?**

Lastly, the trailer you are towing needs to be balanced properly, with the majority of the weight close to the axles and as low as possible. Trailers that have sway issues are usually off-balance - this can result in major accidents. Aim to have 6 - 12% of the weight of the trailer on the tow ball, and for your weights to be close to the centre. Big toolboxes on the back of a caravan, or lots of weight right at the back is terrible for sway.

## **Have a hitch and unhitch process**

You wouldn't believe the number of people who drive off with their jockey wheels down, or hand brake engaged. When you hook and unhook, have a process that you follow each time, checking off everything as you go. Is the awning in? Are the doors shut? Are the safety chains on? Is the hitch secured and breakaway cable connected? Do the lights work? Is the jockey wheel up and secure? Is the hand brake in the correct location?

Taking 5 minutes to walk around properly before you depart or unhitch will save you a fortune in money and frustration when things go wrong.



*Are you hitched up properly?*

## **Is your vehicle set up correctly?**

You can't take a brand new dual cab ute to the caravan dealership, hook up your brand new



giant caravan and drive away. There are requirements on your vehicle to tow trailers:

## Suitable towbar, wiring and tow hitch

A lot of 4WDs don't come from the factory with tow bars, or the right hitch, or even the wiring in place to make your trailer lights operate. Before you tow a trailer, make sure your vehicle has the right hitch, wiring in place and a suitable tow bar for the weights towed.



*A Redarc electric brake controller.*

## Brake controller

Any trailer weighing over 750kg must have brakes. Some use a mechanical system where the hitch moves in and out and applies the brakes, but a large number of trailers today use electronic brakes, which must be activated by the vehicle towing the trailer. This is done using an electric brake controller fitted to your vehicle. Redarc makes a fantastic compact unit that tells the trailer brakes to come on when your 4WD also slows.

Make sure you understand how to adjust the brake controller settings to provide the right amount of braking before any trip. And, in an emergency, make sure you know how to activate it without touching the vehicle's brakes.



*Extension mirrors are a legal requirement for towing wide trailers.*

## Extension mirrors

Ever wondered why some 4WDs have giant mirrors on them? It's not because they look great - it's for towing wide trailers! By law, you must be able to see down the back of your trailer, and for wide trailers (like a lot of caravans) you must fit extension mirrors. If you measure from the outside of one mirror to the other, it must be wider than the width of your trailer. No exceptions. If it isn't, you need extendable mirrors or towing mirrors that extend past the width of your existing vehicle mirrors.

## Suitable suspension

It's not uncommon to see a 4WD towing a trailer with its headlights pointed to the sky, rear wheels nearly touching the panels and a trailer drawbar pointing down. This is poor load distribution, incorrect hitch height or suspension that is not suitable for the load being towed. You want the vehicle and trailer to be sitting level when hitched and loaded.

If you have problems with a saggy rear end, talk to a suspension specialist and make sure you have the right springs for the job (and that your vehicle/trailer is not overweight!).



*Towing on the beach requires some skill.*



## Towing off-road

In my opinion, the best of Australia is well off the beaten track. There's a lot of trailers that spend many thousands of kilometres off-road, with their owners exploring this magical country. Whether it's at the beach, down a gravel road or climbing through the hills in the high country, there are some skills needed for towing off-road. Before you tackle an off-road track though, make sure your vehicle and trailer are designed for it as many are not! You need to deflate your tyres appropriately, lower your speed and drive to the conditions. Don't try and beat physics - towing a heavy trailer down a soft beach is never going to end well. Get familiar with your vehicle's ability and performance, as well as the dimensions of your setup. You wouldn't be the first person to tow a big caravan down a tight track and end up stuck!



*An ultra gauge for monitoring our 4WDs motor condition.*

## Have some mechanical sympathy

Towing a trailer makes your 4WD work harder. It's basic physics. The cooling system will work harder, as will your transmission. Don't flog your 4WD - understand its limitations and have some mechanical sympathy. Monitor the temperatures carefully, and if you are towing something heavy with an automatic transmission, consider the fitment of a transmission cooler. Avoid towing heavy loads without the transmission locked up (or in overdrive gears on a manual vehicle).

## Respect each other

There are a lot of vehicles on the roads in Australia. Whether it's a 4WD towing a caravan, a giant road train truck or a small 2WD, you need to work together and be respectful. Sit at a safe speed, leave a gap for people to overtake, fit a UHF radio and use it to communicate with others and in general. Simply stated, treat people in the way you'd like to be treated.



*Share the roads and show respect for each other.*

## Do a towing course

This post is just a general guide and is no substitute for a formal towing course. If you are new to the game and want some more confidence, contact your local towing instruction company and do a course. Even learning to back a trailer can take a fair bit of practice, but with the right guidance to start with, you'll walk away feeling much more comfortable towing with your 4WD.

There's nothing better than arriving at camp with your home on wheels right behind you - thousands of people do this every day. If you take the time to do it properly, towing with a 4WD is a breeze and a pleasure.

See you out there!



**Do you tow anything on your travels or do you keep your set up simple?**