

Do you know what your 4WD weighs? If you've never taken your loaded vehicle over a weighbridge, then put it on the list of things to do ASAP!

A heavy 4WD is a recipe for disaster, and there are a huge number of people with 4WD vehicles that are overweight... and in need of a diet.

Next time your vehicle is loaded up for a trip away, swing past the local weighbridge and be prepared for a big shock.

  
*How many 4WDs out there are overweight?*

## Why is weight important?

The weight of your 4WD is important for a number of reasons.

First and foremost, if you exceed the manufacturer's weight allowances you can kiss goodbye your warranty and insurance, and put yourself at risk of a nice fine from Mr. Plod. Yes, I'm dead serious - an overweight 4WD is not legal and puts you at substantial risk.

If you have an accident in an overweight 4WD, things can get messy *real* quick. When you take out an insurance policy, you agree to have a roadworthy 4WD. If its overweight, it's not roadworthy and any insurance claims can be reduced or declined.

  
*A saggy rear end is a good indication of weight.*

Beyond that, the more your 4WD weighs, the more stress it puts on everything from wheel bearings to suspension, the chassis, and even your motor. If you haven't seen the number of bent chassis (particularly dual cabs) in the last few years floating around on social media, you should take a look. It is astounding, and many of them occur from having vehicles that are overweight.

The really sad thing is that so many people are completely unaware of their responsibility to have a vehicle that isn't overweight. It's also extremely easy to end up with a 4WD that is not just a little overweight, but grossly obese.

  
*Excess weight puts a lot of strain on your vehicle.*

## What can your 4WD legally weigh?

Fortunately, this part of the research is really simple. Your owner's manual will have the specifications of your vehicle, and if you can't find it, head over to Redbook and find your make, model, and year. To start with, there are a few things you want to look for - GVM and tare mass.

  
*Check your manual or head to Redbook to find out what the weight limits are for your vehicle.*

## GVM and Tare Mass

The GVM is the Gross Vehicle Mass or the maximum weight your vehicle can be at any time. The tare mass is the weight of your vehicle when it is purchased brand new, stock standard, and with no weight in it. This makes the difference between the two - the amount of weight

you can add to your 4WD, or otherwise known as your payload.


When I say 'add', it refers to any weight sitting on or in your vehicle. This includes passengers, accessories, fuel, water, food, tools, anything else you throw inside the vehicle, and last but not least, the weight a trailer applies to your tow ball (if you are towing). 4WDs start off with payloads (the difference between GVM and tare weight) of around 600kg and work their way up to around 1100kg. That might look like a lot to you on paper, but I can assure you it isn't. Those who have taken their 4WD over a weighbridge will attest to this! Let's take a standard family of 4, in a 4WD with mild modifications like many on the road would have.

  
*A steel bull bar is great, but it is very heavy.*

## **An example of the weight of a family of 4:**

- Family x 4 (240kg)
- Steel Bullbar (50kg)
- Fuel x 70L (60kg)
- Fridge full of food (50kg)
- Dual battery (25kg)
- Drawer System (60kg)
- Spare parts, repair gear and tools (30kg)
- Camping chairs x 4 (25kg)
- Tent (15kg)
- Clothes (40kg)
- Water (50kg)
- Other food (30kg)
- Recovery gear (20kg)
- Portable electronics (20kg)
- Gas cooker and LPG bottle (15kg)
- Towbar (50kg)

Take the above (which is extremely lightly packed in the scheme of things) and you have 780kg. That already exceeds the payload of many 4WD wagons, and you haven't even considered things like a second spare wheel, side steps, winch, fishing gear, solar panels, firewood, scrub bars, roof racks, light bars or spotlights... the list goes on and on.

  
Winches are another essential piece of gear, but they add an extra 40-50kg.

## What happens if you tow a trailer?

If you are getting up there in weight, a great option to reduce the weight of your 4WD is to tow a trailer behind. This can shift some of the weight from your 4WD to another set of wheels behind the vehicle. However, it's important to load a trailer correctly and aim for around 10% of the trailer's total mass to be on the tow ball.

So, for those who are towing heavy camper trailers or caravans, this tow ball weight must also come off your available payload. Many camper trailers today are around the 1.5-tonne mark, so you need 150kg of payload available for the weight of the tow ball. If you tow a big van, this can be up to around the 300-350kg and that can really hurt your payload.



*A Jeep towing a big van.*

## Other Considerations When Towing a Trailer

If you are towing a trailer, there are other things you must comply with as well – the GCM, or Gross Combination Mass, which is the total weight of your vehicle and trailer together. You also can't exceed the maximum tow ball weight for your vehicle and tow bar, along with the maximum towing capacity of the vehicle.

If you are towing near the maximum tow rating of your 4WD and your vehicle has a fair bit of gear in it, there's a very high chance that you will be overweight in GCM.

You also can't overload your trailer (go above the ATM or Aggregate Trailer Mass.)



*Our Isuzu D-MAX prior to new suspension.*

## Buying the Correct Vehicle to Begin With

I've seen it time and time again. A 4WD is purchased, thousands of dollars are poured into it, setting it up to be a practical, comfortable, and functional touring 4WD. Then comes a camper trailer, or caravan to add another level of comfort and ease of travel. Sometime after that, the owners find out what their vehicle actually weighs and that it's dramatically overweight. Hopefully, this is not identified in the case of an accident, or the owners can be in for a very difficult time.

There are thousands of people in Australia in this exact situation right now. Most are totally unaware, and some know but choose to ignore it. The problem is, there's no easy solution. Selling the vehicle or trailer isn't a simple solution. Even if you do head down that path, it's hard to find a suitable 4WD if you have a heavy setup.

I cannot stress the importance of buying a 4WD that is going to suit your requirements more. If you have a big trailer, there's a good chance that a normal 4WD isn't going to cut the mustard. You either need to be looking at light trucks or yank tanks, which have much greater payloads and towing capacities than your normal run-of-the-mill 4WDs.



*Our 80 was a heavy vehicle.*

## Can you upgrade your payload?

There's been a lot of attention, rumours, and false information surrounding the ability to upgrade your payload or GVM over the last few months. As it is now, you can still get GVM upgrades done across Australia. How long this lasts, I can't tell you, but the authorities are looking into it and tightening the reins.

The way it works is simple. You have an approved suspension kit installed by an approved installer. Then an engineer signs the vehicle off as being able to legally carry more weight. This is then transferred to your rego, and the vehicle's specifications are physically changed with a new data plate on the vehicle and new paperwork.

For most common 4WDs, getting another 200-350kg is fairly straightforward. Some aftermarket accessory shops can raise it by up to 500kg, which is a lot of extra wiggle room.



*Do you know the payload of your vehicle?*

## Weight is Bad on a 4WD!

There's no beating physics. The more weight your 4WD has in and on it, the more stress it is put under when off-road. Some manufacturers actually recommend you are at least 20% under the maximum weight when heading off-road, for this exact reason. Every corrugation, hole, and lump you hit in your 4WD passes on stress to various components. The more you weigh, the more stress is applied.

Over time, things will wear out and break - and the heavier your 4WD is the faster this process happens.



*The more weight you're carrying, the more stress is put on your vehicle.*

## Reduce the Weight

Weight is important, and anything you can do to reduce it is a good thing. Aluminium rims and roof racks, lightweight drawer systems, lightweight packing, and spreading the load over a trailer will all make a big difference.

At the end of the day, you don't want to be travelling with a vehicle that is overweight. The risk is simply too high. If you haven't even looked at the weight of your 4WD, now is the time to do so. Head down to the local tip or certified weighbridge to see where you sit, and how much exercise you need to get your 4WD doing!

**Have you considered whether your vehicle is overweight?**