

GVM, Payload, Kerb Mass/Weight? These acronyms can be found on spec sheets, product catalogues, vehicle compliance plates and websites, but what do they actually mean?

They are all in reference to how much of a load your vehicle is designed to carry or haul, which is critical to the safety and efficient operation, and hence the importance of understanding this so informed decisions are made.

GVM - Gross Vehicle Mass:

This is the maximum your vehicle can weigh when fully loaded as specified by the manufacturer. You will usually find this GVM figure on the vehicle's weight placard, generally found in the driver's door opening or in the owner's manual. So GVM is the Kerb Mass plus all accessories (bull bars, roof racks, service body and occupants etc.). This figure is set by the manufacturer.

Tare Weight:

Tare weight is **the acceptable or officially known weight of an empty vehicle or container**. When the tare weight is subtracted from the gross weight, it gives the net weight of cargo.

Kerb Weight:

The kerb weight (also referred to as kerb mass) is the weight of the vehicle from the factory without any passengers, cargo, or additional fit out items. i.e. if the vehicle was purchased as a cab/chassis, the kerb weight is the weight of the vehicle as cab/chassis only. Kerb weight is calculated by adding an empty car's total weight when it has a full tank of fuel, all the necessary fluid such as oil and coolant, and all the equipment that the car comes with as standard.

Payload:

This is the carrying capacity of the vehicle after the vehicle weight, and any additional accessories have been accounted for. Payload indicates the weight of the cargo and tools the vehicle can carry

GCM:

Gross Combined Mass is the maximum combined weight of vehicle, trailer, and any cargo that the vehicle and/or trailer is carrying. This is the maximum mass that the combination of vehicle & trailer can be at any given time.

GVM Upgrades:

Auto Transform supply and install Pedder's GVM+ upgrade kits. These kits are compliant with ADR (Australian Design Rules) and NZTA requirements and upgrade the vehicle suspension to support it carrying more weight. The kits increase the legal GVM that the vehicle can carry, but do not have an impact on the GCM of the vehicle, which is the manufacturer's maximum combined weight of the vehicle and trailer. Effectively, the Pedder's GVM+ kits take part of the allowable trailer weight, and add that to the vehicle weight limit, thereby limiting any overstrain on the drivetrain of the vehicle.

Axle Weights:

Even with a GVM upgrade, it's important to stay within the prescribed axle weights – overloading either of the vehicle axles will affect the stability of the vehicle and make it unsafe for your drivers. It's often easier to overload the rear axle as most of the cargo load is on the rear axle, and weighty trailers will often tip the rear axle over its limit. When towing a trailer, remember that 10% of the trailer weight acts as downforce on the rear axle

**Move
Smarter.**