

# BIG WHEELERS



Fifth wheelers are gaining in popularity as the RV of choice, and there's a growing range of locally-built models.



Top: Big pick-ups, like the Ford F250, are popular tow vehicles in the US and Canada. Below: Dual-cab trucks, like this Iveco, can also make excellent tow vehicles. Right, from top: a rotating hitch attached to a tray, roomy fifth wheeler living, another rotating hitch setup.



One of the more fascinating happenings in the Australian RV world in recent years has been developments in the fifth wheeler market. Fifth wheelers are common in the USA and Canada, but until now in Australia, they have been more of a curiosity. There are several reasons why that has been so and we'll look into those later.

A fifth wheeler is a towed trailer like a caravan, the only difference is the way fifth wheelers are hitched up. Caravans are usually hitched on a towbar at the rear of the tow vehicle, but fifth wheelers hook onto a hitch mounted in front of the tow vehicle's rear axle. They have a front overhang as a consequence.

The other market that makes use of the fifth wheeler concept is the horse world, where fifth wheeler horse floats are common. Occasionally in Australia, and more often across the Tasman, you'll see fifth wheelers where the RV market and the horse world have crossed: the front half of the rig is for humans and the rear half is for horses!

### FIFTH WHEEL?

For those who are new to the fifth wheeler world, it is worth a word or two to explain that rather interesting term: 'fifth wheeler' derives its name from two places.

Stagecoaches (circa 1800s Cobb & Co) normally had four wheels on the ground. It was the fifth wheel (the turntable), fitted on the front axle, upon which the stagecoach sat, allowing the axle, and hence the stagecoach, to turn corners.

A later derivative was the turntable hitch, used on articulated semi-trailers. It took the weight of the trailer, yet still allowed the prime mover to turn corners. A smaller version of that turntable hitch is often used on fifth wheelers.

In Australia, the State registration authority term for fifth wheelers is 'gooseneck trailers'. That is technically correct, because some fifth wheelers don't use a fifth wheel at all. Instead many use the more familiar locking-ball coupling with the towball mounted on the bed of the tow vehicle, rather than on the towbar.

However, as with other things, a specific technical term has become the generic term, and 'fifth wheeler' is undoubtedly here to stay

### PROS AND CONS

So why are fifth wheelers becoming more popular? There are several reasons. Don't tell the caravan manufacturers, but fifth wheelers are easier to tow than caravans when going forward and when reversing.

The optimum position for a fifth wheeler hitch is about 150mm in front of the rear axle of the tow vehicle. This places the entire pin (ball) weight in front of the axle, not two feet behind it as in a caravan, giving much better weight distribution and more control of the tow vehicle. There's no need for weight-distribution gear and ball weight on the towbar becomes irrelevant.

Another advantage has to do with the towing-combination length. Take for example a 22ft (6.71m) fifth wheeler and a 16ft 5in (5m) tow vehicle. Because the fifth wheeler actually overhangs the tow vehicle, you take off about 7ft (2.13m) for the overhang, add about 1ft (305mm) for the gap between the two, and end up with a towing combination length of about 32ft (9.87m).

With a caravan combination, there's 16ft (5m) for the tow vehicle, 22ft (6.71m) for the van and 6ft (1.8m) for the drawbar, which gives a total of 44ft (13.4m), a fair bit of difference. When towing, a fifth wheeler is an inherently more stable prospect.

There's little of the snatching and jerking that sometimes come with caravan towing, sideways rock and roll is often reduced, and a fifth wheeler can often be manoeuvred into tight spots caravanners only dream about.

It does not all go the fifth wheeler's way, because like a semi-trailer, fifth wheelers can still jack-knife on slippery roads or in emergency braking situations.

An internal design advantage that fifth wheelers have over both caravans and motorhomes is the location of a double bed. In all RVs it takes up space. In C class motorhomes the main bed can go in the Luton peak, above the driver's cab, but it is not always easy to climb into. In a fifth wheeler, the natural location for the main bed is in the overhang, which is at one end of the rig and out of the way. Even with overhangs that have a low roof height, it is still a setup that works well.

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One manufacturer, Travelhome, has even set up two single beds that can be zipped together if a double is required.

Like with any comparison, the advantages do not all go the fifth wheeler's way. The tow vehicle has to be a ute, tray-top, light commercial truck, or, in some large cases, a prime mover. Some dual-cab tow vehicles can be used, but not all. The bed or tray of the tow vehicle must have the correct hitch, whether it be a locked ball or the turntable variety. In an emergency towing situation a few special arrangements might have to be made.

At present, mainly because of low-volume manufacturing, fifth wheelers are more expensive than conventional caravans, but if they become more popular then that will probably change.

Hitches do take up space in the ute or truck bed, but some designs allow the hitch to be totally removed so that the ute or truck can be used conventionally.

## TOW VEHICLES

While caravans, campervans and motorhomes have been the RV of choice for many years in Australia, fifth wheelers haven't been as popular. An explanation for that has to do with the tow vehicle.

In the US and Canada, fifth wheelers are very popular, as is the ubiquitous US-style pick-up truck, or, as they are oddly known, sports utility vehicle (or SUV), such as the Ford F series or the Dodge Ram. Consequently fifth wheelers are mainly built to suit vehicles of that size and not smaller, Aussie-style utes.

Several Australian manufacturers have made various designs and a few US imports have trickled in over the years, but that has been about it. Lately a few local manufacturers and one or two importers have seen the light and been making fifth wheelers of a size that are suitable for utes and tray-tops.

Given the relative proliferation of the Aussie ute, it is not surprising that fifth

wheeler interest has started to emerge in a much bigger way.

Large-vehicle driver's licences are a concern for many, yet fifth wheelers are not really any different from a car, truck or motorhome. Most fifth wheelers are not classed as semi-trailers and therefore do not require a Heavy Combination (HC) licence.

If the tow vehicle has a gross vehicle mass (GVM) of less than 4.5 tonnes, then a C class licence is required. For a tow vehicle with a GVM between 4.5 tonnes and 8 tonnes, then a Light Rigid (LR) truck licence is needed and that will cover most fifth wheelers. In the event that the fifth wheeler has an aggregate trailer mass (ATM) of more than 9 tonnes, then an HC licence applies.

On a similar note, the same design rules apply to fifth wheelers as to caravans, with the exception that if a fifth wheeler has an ATM of more than 4.5 tonnes, then larger axles and air brakes have to be fitted.

Up to 4.5 tonnes, conventional caravan electric brakes are allowed.

Like towing a caravan, having the correct tow vehicle for a fifth wheeler is important. There are a few misconceptions floating around on this subject, which are not helped by the fact that some tow vehicle manufacturers have not quite come to grips with the fifth wheeler scene yet.

In a way, it is a bit like the problem caravanners have had, where tow vehicle manufacturers specified maximum towball weights and maximum towing weights that didn't match up.

Tow vehicles must have adequate towing capacity to legally tow the weight of a fifth wheeler. That may seem to be common sense, but how do you apply it? Tow vehicle manufacturers generally specify maximum towing weight, assuming that a conventional towbar is being used, but what happens if you are towing a fifth wheeler?



**Above left:** Local manufacturers are building units to suit one-tonners. **Above:** Towing is a breeze. **Left:** With the bedroom at the front there's plenty of 'daytime' space.

Very few manufacturers state a maximum fifth wheeler towing weight, so another figure, the gross combination mass (GCM), has to be used, along with a bit of mathematics.

The GCM is specified by the tow vehicle manufacturer and refers to the maximum legal loaded weight of both tow vehicle and trailer. Taking a Ford Falcon XL cab chassis ute for example. Ford specifies the GCM as 4875kg for a one-tonne ute fitted with a 2300kg tow

pack. The latter doesn't have much to do with fifth wheeler towing, but that's the way that Ford specifies it.

The Tare weight of the Ford ute is listed as 1545kg. Let's say we have a fifth wheeler with a Tare weight of 2200kg. Adding the two Tare weights together (1545kg + 2200kg) and subtracting them from the Falcon GCM (4875kg), leaves a total of 1130kg for load on the vehicles, including the driver and passenger weights.

In this calculation, the individual gross vehicle mass (GVM) of the tow vehicle and trailer must not be exceeded either. Not so helpfully, not all vehicle manufacturers specify a GCM figure. The GCM of the Nissan Navara – currently the tow vehicle of choice for many – isn't clearly specified, so the maximum combination weight is arrived at by adding the GVM of something like a Navara DX dual cab (2920kg) to the maximum trailer weight (3000kg), giving a figure of 5920kg. Note this is higher than the Falcon's figure, for a similarly sized vehicle.

When considering the purchase of a tow vehicle, a fifth wheeler or both, it's best to check of all weight figures, and if load capacity is marginal, then a visit to a

weighbridge is recommended.

Something else to remember with trucks and utes is that while manufacturers specify the maximum load that can be carried on the tray, when towing a fifth wheeler that maximum load is reduced by the pin weight of the fifth wheeler. There's an interesting anomaly here to do with caravan towing.

Theoretically, if you tow a caravan, the towball weight does not affect the maximum load that can be carried. If you tow a fifth wheeler then the maximum load is reduced.

If you are considering importing a tow vehicle from the US, be aware of a few considerations. All imported vehicles should be converted to right-hand drive and all should be fitted with an Australian compliance plate.

Also, especially in the 4.5-tonne-and-above category, light trucks or SUVs are often rated and certified lower in Australia than their US specifications: an vehicle ideal in the US may not be suitable for your prospective towing requirements in Australia.

In the next issue of MHW we'll look at fifth wheeler interiors, compliance issues and some additional information concerning owning a fifth wheeler. ■