



HOW TO TOW SAFELY

Towing safely involves more than hitching up and driving off. Peter Rosenthal runs through what you need to watch out for



Off to the races! In this case the car weighs 550kg and the trailer 400kg - well within the motorhome's 2,000kg towing limit. Noseweight is adjusted by moving the car forward or backwards

Assuming you've got a sturdy hitch fitted to your vehicle, then the next thing to consider is what you can tow. The vehicle manufacturer should list the maximum weight you can tow in the handbook, while the towbar manufacturer will be able to tell you the maximum noseweight (the vertical force pushing down on the top of the ball hitch).

In the case of my own Ford Transit twin rear wheel Eurostyle A63, it can tow a maximum of 2,000kg with a maximum of 75kg on the noseweight. It's worth pointing out that the noseweight must be subtracted from your vehicle's payload. In practice this is rarely an issue with towing as you can always decant weight into the item you're towing to better balance the trailer and reduce the noseweight.

The first point to make is that you must weigh whatever you plan to tow – do not pass go, visit your nearest weighbridge / scrap metal merchant. Skip this step at your peril. Armed with the actual numbers, you may then need to adjust the weights between the trailer and motorhome. The combined weight must be under the gross train weight (and you need to check your driving licence categories if you passed your test after 1997). Typically, boats tend to be the heaviest things to tow – especially power boats, so make sure you weigh these, carefully. They also tend to have large fuel tanks, so make sure you allow for this

(it's safe to assume 1 litre of fuel weighs 1kg – it's slightly less so will give a margin of error)

Assuming the weights are all within your vehicle's towing limits the next thing to look at is how well it is balanced. This is less important for anything with a twin-axle – such as a caravan or car trailer, as they tend to be inherently better balanced and rarely put a tremendous load on the nose weight.

The key thing to check (apart from measuring the noseweight) is that whatever you're towing looks level and that the motorhome's rear suspension isn't overly compressed (or sat on the bump stops / spring assistors). If, when viewed from the side, the entire rig is 'V' shaped, there's too much weight pressing down on the motorhome. Overly light steering and the feeling of the trailer 'wagging the dog' are other sure signs of an imbalanced trailer load. So how can you cure it?

Well, in several ways. The easiest method is to shift some weight about so the entire rig is better balanced. In the case of a caravan, this is easy – simply shift weight around in the interior. With a car on a trailer, either move it forward or back on the trailer or park it the other way around (typically the engine end will be heaviest). With boats, you may need to move a load around on the trailer.

Anything attached to the trailer needs to be well strapped down – with trailers, if it can

break free, it will – they are far more prone to vibration than the motorhome itself. Nylok nuts, threadlock, cable ties, bungee cords, ratchet strap and gaffer tape are all essential items of towing kit.

With the load balanced the next thing to check is the motorhome tyre pressures. You need to keep a very careful eye on these when towing and use a slightly higher pressure than normal (or the laden figure marked on the door jamb / owner's manual) so long as it's under the maximum inflation pressure stamped into the tyre sidewall.

Usually, though, it is the trailer tyres which are the most important things to check. Over the years the biggest issue I've had with towing nearly always related to the trailer tyres or wheels. The tyre pressures must be checked and you need to keep an eye on them on the journey – if one tyre on a twin-axle trailer is soft, it tends to overheat the tyres next to it. Keep the speed below 60mph (the maximum allowable for towing) and give the tyres a rest every few hours. Trailer tyres tend to be cheap and have a low speed-rating so don't tolerate high speeds or all-day motorway driving very well.

The other issue is trailer wheel bearings. These never seem to last that well and the grease-packed roller needle bearings need regular maintenance. I'd always get them checked before you set off on any long trip – get



Not many motorhomes can claim to have towed a twin-axle caravan over the Alps!



Main issue with towing a caravan is the length



Motorhome got an overnight breather in Switzerland before heading on to Italy



Many racers hire a trailer when they need it - be cautious as hired trailers tend to be big and heavy



It blew up and had to be trailered home a few hours after this shot was taken...



Take great care towing motor boats - they can be incredible heavy (especially with sailing boats on top of them!). This rig was too heavy for the motorhome to tow and had to be pulled by a Land Rover with a 3,500kg towing limit

them serviced at least annually. They're easy to service yourself and replacement bearings are inexpensive (usually around £7 a bearing).

Typically larger car-sized wheels seem to give fewer problems than the smaller diameter trailer wheels. It's always essential to carry a spare wheel and tyre for the trailer.

Boat trailers that go in salt water need far more maintenance on the bearings and you need to have the bearings checked several times a year to avoid them failing. When the trailer is on the slipway they are immersed in water under pressure and this often creeps past the rubber seals and starts to corrode the bearings. Sea water is even more aggressive due to the salt content.

Hot wheel centres, overheated grease dribbling out of the wheel centre cap and funny burnt smells are all a sure sign that your bearings will need rebuilding. In the worst case scenario the wheel can seize or develop terrible vibrations.

Binding trailer brakes give similar symptoms to those described above and if the trailer feels like it's dragging (and the handbrake is off) then they need looking at.

You probably won't tow a caravan that

often, but if you tow one behind a coachbuilt you'll have few problems – most are under two tonnes and the extra width and drag is far less noticeable than it is on a car.

With any trailer, allow more time to accelerate and keep a careful eye on your mirrors when turning or at petrol stations – it's very easy to clip something. Equally, with a trailer, your stopping distance increases massively and there tends to be a two-stage effect when you brake: first the motorhome brakes kick in, followed, a fraction later, by the trailer brakes (most are actuated by compression of the ball hitch).

In general, motorhomes with short rear overhangs and twin rear wheels tow the best, but the majority of motorhomes, if suitable for a towbar, tend to tow pretty well. As they usually weigh around three tonnes, they tend to remain more planted on the road and are far less affected by the movements of the trailer than cars are. In fact, it's very easy to forget you're actually towing much of the time.

Fuel economy usually suffers when towing (though with my own overcab coachbuilt it barely makes a difference) to the tune of a couple of mpg, but this is more dependent on

the drag rather than the weight.

Before you set off on any journey, do a bulb test on the trailer – get your passenger to press the brake pedal and the use indicators.

When hitching up to a trailer you'll find twin-axle trailers far easier to move from side to side if the jockey wheel is wound up high enough for the front wheels to be off the ground. Make sure you keep the handbrake on until you've wound down onto the hitch.

Some trailers have brakes that work in reverse, so if you unhitch these make sure the handbrake is on and wheels are chocked. Handbrakes tend to vary in their effectiveness, so chocks are an essential item of towing kit.

Make sure the breakaway cable is attached to something solid, the handbrake is off and the electrical cable isn't dragging on the ground, or too tight – use cable ties or bungee cord to keep it out of the way.

Finally, don't forget about the cardinal sin of towing – make sure the jockey wheel is up as high as you can get it and securely clamped. It makes things very interesting if you've left it down and arrive at your destination with part of a wheel, or worse still just a stump! Been there, done that! ■