



# Scottish Rowing Towing a Trailer

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This document sets out an explanation of the rules on who can do what by way of trailer towing. The official DVLA booklet on the subject is available as a download via the Safety section of the Scottish Rowing web site's Governance page – there's a link to that on the News page. This is very detailed and covers more vehicle and trailer combinations than we generally use in the rowing world, so here it is condensed a bit.

First, look at your Driving Licence – the bit at the bottom showing the categories of vehicle that you are entitled to drive. The ones we are interested in are

Category	What it covers	Who has it
B	Car with a small trailer and some bigger ones	All car drivers
BE	Car with a big trailer	Only those who passed their test before 1 <sup>st</sup> Jan 1997 unless they have passed an additional test.
C1	Small truck with a small trailer	Only those who passed their test before 1 <sup>st</sup> Jan 1997 unless they have passed an additional test.
C1E	Small truck with a big trailer	Only those who passed their test before 1 <sup>st</sup> Jan 1997 unless they have passed additional tests.
D1	Minibus with a small trailer	Only those who passed their test before 1 <sup>st</sup> Jan 1997 unless they have passed an additional test.
D1E	Minibus with a large trailer	Only those who passed their test before 1 <sup>st</sup> Jan 1997 unless they have passed additional tests.

It should be clear from this table that the world is divided into 2 categories of person – those who passed their test before 1<sup>st</sup> January 1997 (the **Superdrivers**), and those who didn't pass their test until after 1<sup>st</sup> January 1997 (the **Other Drivers**).

## The Superdrivers

Those with full licences dating from before 1<sup>st</sup> January 1997 are allowed to drive and tow pretty nearly anything. With a car, the limit is a combined MAM of 8.25 tonnes (8250 kg).

What's an MAM I hear you say? It stands for Maximum Authorised Mass. An alternative term used is Gross Vehicle Weight (GVW). This is the maker's specification of how heavy the fully loaded vehicle(s) can safely be. It is found in your car handbook, and the vehicle identification plate under the bonnet of your car (or elsewhere – see handbook), or on the frame of the trailer.

Another term we need to use is Unladen Mass (or Weight). This is the mass (or weight) of the empty vehicle (or trailer). This is not the same as the Kerb Weight which manufacturers often quote. To get the Unladen Mass from the Kerb Weight you need to subtract 75 kg (for the driver) and then the mass of the contents of a 95% full fuel tank! So you may need to know your fuel tank capacity and the density of petrol or diesel.



And finally, some car makers quote a **Maximum Towing Weight** for the car. **Clearly, this must not be exceeded.** Nor must you exceed the car's **Maximum (or Gross) Train Weight**; this is the mass of the fully loaded trailer **plus** the fully loaded mass of the car. You need to estimate these. The table below gives some approximate figures for the loads associated with different boat types. It should let you work out approximately how big a load you are putting on your trailer. Add in the unladen mass of the trailer and you have the fully loaded mass. All that remains to do is work out how heavy are your passengers, fuel and the baggage in your car.

Boat type	FISA Minimum Mass (kg)	Club Boat Mass (kg)	Oar Mass (kg)	Total Mass (kg)
8+	93	100	20	120
4x	52	55	8	63
4+	51	54	10	64
4-	50	53	10	63
2+	32	34	5	39
2-	27	29	5	34
2x	28	30	4	34
1x	14	15	2	17

### Older Superdrivers

Beware. Your licence expires when you reach the age of 70. You then need to renew at 3-year intervals. When renewing, you have to specify which categories you wish to retain. Being granted them may be subject to passing a medical examination. Please check your licence to make sure you are legal.

### The Other Drivers

If you've passed your driving test more recently than 1<sup>st</sup> January 1997 you need to be careful about what you attempt to tow, unless you've passed the additional tests needed to upgrade your licence categories. If you tow too big a trailer and something goes awry, not only will you be liable to prosecution, but your insurance company will also cut you adrift and you will therefore be personally liable for any damage done by the vehicle or trailer.

OK, so what can you tow with your car?

A trailer whose MAM is 750 kg or less is usually ok – unless you have a very small car. Easy one that.

With bigger (braked) trailers you need to know the Unladen Mass and MAM of your car and the MAM of the trailer.

First of all, the MAM of the trailer must not exceed 1200 kg (the new breed of lightweight rowing trailer). Older trailers have a MAM of at least 2000 kg, so you cannot tow one under any circumstances.

The next restriction is that the MAM of the trailer must not be greater than the Unladen Mass of the car. So, for a 1200 kg MAM trailer, your car must have an Unladen Mass of at least 1200 kg.



However, the combined MAM must not be greater than 3500 kg.

Let's take my car (Peugeot 407 saloon) as an example. It has a Kerb Weight of 1582 kg, a MAM of 1995 kg, and a specified maximum (braked) trailer weight of 1600 kg. Clearly a new lightweight trailer does not exceed the car's towing capacity.

What, however, is the Unladen Mass of the car? 1582 kg – 75 kg (driver) is 1507 kg. The fuel tank holds 67 litres of diesel. So 95% of 67 litres is 63.65 litres. What mass of diesel is this? Wikipedia tells me the density is **0.85 kg/litre**, so I need to subtract another  $0.85 \times 63.65 = 54$  kg. So the Unladen Mass is 1453 kg. Again, for a driver without BE on his licence, this is greater than the 1200 kg MAM trailer.

Now, if we add together the 1200 kg for the trailer and the 1995 kg MAM of the car we get 3195 kg which is less than the 3500 kg limit. OK once again.

Finally, the car's GrossTrain Weight is 3680 kg, so again the combination (if not overloaded) does not exceed this limit.

I'm sorry, but Other Drivers need to do this kind of calculation for the vehicle they intend to tow with. Your car's handbook will either give you the data direct or tell you where the VIN plate which carries the data is located on the car.

Wikipedia says the density of **petrol** varies between **0.71 and 0.77 kg/litre** according to "aromatic content." No, that doesn't mean how nice it smells!

Using **Chelsea Tractors** (SUVs) to tow trailers has become popular in recent years. Care needs to be taken here if you're not a Superdriver and haven't taken the additional test for towing trailers. These vehicles are often heavier than standard saloon cars and it would not be difficult to exceed the 3500 kg combined MAM. With these vehicles, this is the criterion to check first; the MAM of the car cannot be more than 2300 kg for a 1200 kg MAM trailer.

### Minibuses

To drive a minibus if you're not a Superdriver, you need to take a D1 category test. Once you're passed for D1 you can still only tow a trailer whose MAM is no more than 750 kg. To tow a bigger trailer with a minibus you also need to pass the D1E test, otherwise the same restrictions will apply – 3500 kg combined MAM. And like SUVs minibuses have a bigger MAM than saloon cars.

The same applies to minibuses which have had seats removed in order to have them classified as private cars. Removing seats does not reduce the vehicle's MAM.

### Note

Almost all the legal requirements are based on car and trailer specifications, not on how much load you actually put on the trailer. You can't tow an illegal trailer just because you only have only a boat or two on it and the actual load is lighter than the MAM.

### And Finally

1. Do remember that your speed limit when towing a trailer is 60 mph on dual carriageways and motorways, 50 mph on other roads (unless a lower limit applies to the road).



2. Stay out of the outside lane on 3-lane motorways.
3. Make sure your car insurance covers trailer towing.
4. Check what your Driving Licence says you're allowed to do.