

Trailing Your Shrimper – Tow Cars

By Keith Thatcher, Shrimper 144 (*Winkle*) (December 2009)

Having investigated the subject of tow cars a few years ago whilst looking for a suitable vehicle to pull my Shrimper, it was felt that this information might also prove of benefit to anyone else carrying out the same exercise. This is my understanding and interpretation of the rules, as they currently stand, plus a few thoughts on possible towing vehicles. Obviously, legislation can change, often without notice, so I would recommend you satisfy yourself that this information is correct before acting upon it.

The legal bit

Towing Regulations in force in December 2009 state that a vehicle having a kerbside weight (defined as the vehicle with all fluids, a driver and full tank of fuel) not exceeding 3.5 tonnes, which includes all family cars, can tow a trailer up to 3500kg Gross Laden Weight (GLW) (i.e. the weight of trailer plus maximum load). The trailer must not exceed 7 metres long x 2.3 meters wide, including drawbar and the overall length of the complete rig must not exceed 18 metres.

These maxima are qualified in that the GLW must not exceed the kerb weight of the vehicle and/or its maximum towing capacity (as specified by the manufacturer), whichever is the lower. Most towing organisations actually recommend that the GLW of the trailer should not exceed 85% of the kerb weight of the vehicle, again limited by the maximum towing capacity. The National Trailer & Towing Association website states that traffic police tend to use the vehicle manufacturer's towing capacity when checking trailers for legality.

This is a very simplified summary of the regulations, so for a fuller story, including further limitations depending on the type of driving licence held, you might like to look at the National Trailer & Towing Association website, <http://www.ntta.co.uk/law/index.htm>

My interpretation of the length requirement is that it refers to the overall length of the object being towed, so the boat must be taken into account. The overall length of a Shrimper, with bowsprit fitted but without rudder, is 6.85 m. Onto this must be added the length of hitch forward of the bowsprit, which is likely to vary with the design and make of trailer. It seems probable that most Shrimpers do comply - *Winkle* on her Bramber Breakback trailer measures just under 7 metres from transom to hitch, but yours might be longer. As responsible boat owners we should be seen to be complying with the law, so it would pay to check. I would also be interested to learn if my interpretation of the regulation is correct. Most weekends you can see any number of boats, often significantly longer than a Shrimper, being happily trailed around the country behind some quite small family cars.

Since 1982 it has been a legal requirement for GLW to be marked on the information plate fixed to all new trailers sold in the UK. The plate on my 1990 Bramber Breakback shows a GLW of 1500 kg and maximum load capacity of 1165 kg, the difference (335 kg) being the unladen weight of the trailer. I believe my trailer to be at the lower end of the weight range - more modern Brambers and those from other manufacturers often have a greater load capacity and/or unladen weight, both of which will increase GLW and push up the vehicle requirement. You will need to check on your particular trailer to confirm the figures.

Using the above information, to pull my trailer I need a vehicle at least 1.5 tonne in weight (1.75 tonne if using a trailer limit of 85%) with a maximum towing capability of at least 1500kg. Most family cars rarely achieve this combination, which is why Shrimper owners

who tow regularly often use either a 4x4, a large estate car or a people carrier (I even know of one owner who used a Transit van).

Tow Cars

Parker's guide (<http://www.parkers.co.uk/cars/reviews/>) quotes a towing capacity for most recent makes and models and is a useful source if looking for a new tow car. It can also be used to check if your current vehicle is suitable, but more accurate information is generally contained in the owner's handbook supplied with the car. Although chassis design is obviously one of the main criteria used by the manufacturer when specifying the towing capability, engine type and power also have an effect. More powerful versions of a particular model, and particularly diesels, often have an enhanced towing capability when compared with their lower powered stable mates. Unfortunately, kerb weight does not always go up by the same amount, so the enhanced capacity may not be useable when towing a Shrimper.

My tow car is an old (1998) Landrover Discovery TDI automatic, which weighs 2.05 tonnes and has a theoretical towing capability of 4 tonnes. This provides a trailer to car weight ratio of 73% that makes the whole rig feel very stable on the road. As everyday transport the Discovery is a bit cumbersome and not too economic, but being permanent four wheel drive and having a low ratio gearbox there is little that it cannot negotiate. The auto version also has the benefit of cruise control, magic for long distance motorway towing.

Other options worth considering include the smaller 4x4s, such as the Toyota Rav 4, Honda CR-V and Nissan X-Trail (although a Shrimper trailer is right on the upper towing limit for older models), the luxury SUVs (BMW, Lexus, etc.) plus, of course, the established large 4x4s from Landrover, Rangerover, Misubishi, Toyota & Nissan. You might also wish to look at offerings from Kia and Hyundai as these are fast being recognised as good tow cars, fitting somewhere between the traditional large 4x4s and the smaller SUVs.

If looking for more traditional car shape and comfort then you are limited to the larger size family cars/estates, such as Volvo V70, Mercedes E series, Saab, or larger BMWs. Of these only the Volvo has a 4x4 option, which I believe to be distinct advantage on steep slipways or beaches. Kerbside weight might also be an issue on this type of vehicle.

For those new to trailing, it should be noted that correct hitch download weight is critical for rig stability. Too little or too much weight on the ball hitch and the rig can become unstable, especially during hard braking. I aim for between 75 and 80 kg as this drops nicely into the Landrover specification, but other vehicles may differ, so you will need to check the requirement and adjust trailer balance accordingly. Use a set of bathroom scales and a block of wood under the hitch to measure the download.

One final note on trailers, there is evidence to support a view that the actual weight of a Shrimper, in full sailing condition with all the extra equipment we owners tend to carry, is actually well above Cornish Crabbers catalogue figure of 1065 kg. If true, this means that the majority of standard trailers, mine included, are probably overloaded. Bryn Bird (see *Technical - Trailers* section of the SOA website) actually weighed his boat and was horrified at the result, which is why he based the design of his custom trailer on GLW of 1800kg.