

Rowing & Trailers

The very nature of our sport requires that our equipment is sleek, fragile, and necessarily transportable, and unless you are fortunate enough to reside on a riverbank, you will at some stage have to transport your boat by road. With most Clubs this will involve the use of a Trailer.

We have attempted in this document to set out some advice for the average Rowing Club or Crew on the legal and safety considerations which present themselves when towing a boat trailer. The information is divided into three areas, Before the Journey, during the journey, and after the journey.

Before the Journey

The Driver

- Any driver who has taken their driving test after 1st January 1997, may not have the correct licence to tow a trailer unless they have taken at least a category 'B + E' test (Car plus Trailer), or 'D1 + E' (Minibus + Trailer), [*Holders of a full LGV C+E, or PCV D + E, will automatically have these entitlements*].
- There are permutations of vehicle and Trailer which may be driven on a category B' licence alone, but with the weights and dimensions of Rowing boat trailers, it is unlikely that the average Rowing Club trailer will fall into this category. In essence, if the maximum authorised mass (i.e. the maximum permitted all up weight) of the trailer exceeds 750 Kg, then it will probably require a 'B + E' licence to drive. [*Department of Transport information leaflet 'INF 30' gives more detail*].
- If you need to obtain a trailer entitlement for your licence, this will involve taking and passing a Department of Transport driving test, currently costing £105.00, so applicants would be well advised to seek professional tuition or advice before taking the test. Also the trailer used for the test must be a 'Box' type trailer with a minimum authorised mass of at least 1 tonne, so a 'skeletal' boat trailer would not be acceptable. The test, which requires that you drive at the same standard that you did when you passed your original driving test, also includes a reversing exercise and other manoeuvring exercises, together with a requirement to physically un-couple and re-couple the trailer safely.

The Trailer

Assuming that you now have your licence, we will now look at the requirements for the trailer.

- There are various proprietary trailer manufacturers who produce Rowing boat trailers which are purpose built and will have met all the legal constraints imposed, but check that your trailer is marked with a permanently attached

plate stating the maximum authorised mass, [to re-iterate, that is the total permissible weight of the trailer **and** its load].

- It would be a worthwhile exercise to load the trailer to its maximum capacity and take it to a weighbridge to ascertain the actual weight that you are towing; in all likelihood this will exceed 1 tonne.
- The trailer must be legally roadworthy with regard to brakes, lights and tyres, the brake will normally be a hydraulically damped 'inertia, type, with a ratchet and pall handbrake for use when detached. The inertia brake works on the principle that when the Prime Mover, (vehicle) slows, the momentum of the trailer pushes a hydraulic ram which in turn applies the trailer brakes, this should release as the vehicle moves forward.
- There must also be a breakaway connection independently attaching the trailer brake to the vehicle so that in the event of an unplanned 'detachment', the trailer brake would be applied before the link snapped.
- The operation of the trailer brake should be checked and tested regularly, and the results recorded, (see later in Trailer maintenance).
- All lights must work and be checked before each journey and again at each time the lighting lead is connected / reconnected.
- Lenses must be clean and not be cracked or missing, remembering that it is illegal to show a white light to the rear except when reversing.
- The trailer number plate (which must match the towing vehicle), must also be illuminated, and the rear lights should be no more than 1 metre from the rearmost projection of the trailer or the load
- Tyres must be legal with regard to structure, tread depth, and inflation pressure, check all tyres before each journey, especially for evidence of perishing which can occur when a tyre has not been used for a period of time (*e.g. over a winter*), inflate to the manufacturers recommended pressure for the load, and re-check regularly.
- If you have a spare wheel for the trailer, ensure that this is also correctly checked and inflated

The Vehicle

- The vehicle must be capable of pulling the trailer. It would be foolish to attempt to tow a loaded boat trailer weighing in excess of one tonne, with a car weighing 800 Kg for example. Establish the un-laden weight for the car / towing vehicle, either by referring to the manufacturers' specification or better still on the weighbridge where you got the trailer weighed.
- Also check the manufacturers' specified towing capacity, which of course should be at least equal to or greater than the weight of the loaded trailer.

- It should go without saying that the brakes, lights, and tyres on the towing vehicle should be checked with the same regularity as the trailer, but also check engine oil and coolant, as towing any trailer will increase the load on the engine and transmission, with the consequent effect on the cooling and lubricating system. Fuel efficiency will also be affected, so keep a regular eye on the fuel gauge, it can be at the least very embarrassing, and at worst downright dangerous to run out of fuel in a vulnerable position on the road.

Insurance

- Whilst any trailer properly attached to a vehicle will automatically be covered under the requirements of the Road Traffic Act, it would be worth checking with your insurance company that you are covered for towing and that the insurance cover extends to the trailer, if not, you should consider insuring the trailer separately, check with the club's insurers.

Loading the Trailer

- As stated before, the trailer must not be overloaded beyond its authorised capacity, remember that the security of the load is the legal responsibility of the **Driver**, so whilst everyone involved should assist with Boat loading, the final check before moving off should be made by the Driver, since it is their licence that will be affected should anything become detached or fall off during the journey.
- Always use proprietary securing straps where possible, these should have their safe working load and breaking strain clearly identified.
- Quarantine or dispose of any straps that appear damaged or defective.
- When loading the trailer, major consideration must be given to the distribution of weight, The Load should be evenly distributed across the width and length of the trailer to ensure stability when cornering or braking
- Keep the centre of gravity as low as is practical.
- The Trailer should be loaded slightly heavier at the tow hitch end within the dimensional restrictions of the Vehicle, the Trailer, and the load.
- Ensure that any overhang is within the legal constraints, and attach a high visibility marker (Red Flag), to the rearmost projection. If driving at night, a red lamp, either wired to the trailer lights or a battery operated 'Cycle Lamp' could be utilized.

Attaching the trailer

- Since your journey may be in excess of 100 miles of varying road type and terrain, not to mention the regatta field, and added to this the fact that the load may represent thousands of pounds worth of the clubs assets, it is vital that the coupling of the trailer is secure.

- The tow hitch itself must be sound and properly attached / secured to the vehicle.
- There must be an emergency security device (breakaway connection) that should operate the trailer brake should the combination become accidentally detached.
- Electric / lighting cables must be connected with sufficient flexibility to enable articulation whilst at the same time not dragging on the ground or road.
- The security of the coupling **must** always be 'proved' by winding down the jockey wheel and attempting to raise the rear of the vehicle when connected, if the trailer detaches at this point start again and check all security catches / clips etcetera.
- Any 'Anti-Sway' devices must be properly fitted before the journey.
- After proving the coupling, the jockey wheel must be raised and correctly stowed so as not to affect or interfere with the operation of the trailer brake.

Having checked and re-checked all the above items, we should now be ready to wend our merry way to the regatta! And so to phase 2

During the Journey

Planning

- It is essential that your journey is planned to take account of roads, distances, other traffic, and always allow for the unexpected.
- Give yourself plenty of time, remember that driving with a trailer will always take longer than if not towing, if it is a regular journey that you are familiar with, then allow at least an additional 20% time duration .
- It would also be wise to stop after a short period of time into the journey to re-check the load which may have settled and become insecure.
- Use maps to identify any possible restriction, if using satellite navigation systems, be aware that they may not take into account the new length and lack of manoeuvrability of your combination
- Pay particular attention to road signs especially those giving length, weight or height restrictions
- Avoid reversing wherever possible, but if there is no alternative, use another crew member to act as a guide (*remember Hi-Viz Clothing if stood in the road*)

Speed

Remember that towing anything incurs lower speed limits on some roads

- 50 mph on de-restricted single carriageways
- 60 mph on de-restricted dual carriageways
- 60 mph on Motorways, (also Towing vehicles may not use lane 3 on a motorway)
- Speed limits are not targets, they are maximums, depending on the road and traffic conditions, adjust your speed so that you are always in control of the forces.
- Do not allow the trailer to 'push', maintain an element of torque on the drive axle by selecting the right gear.
- Be aware of the possibility of 'Trailer snake', this is when the momentum of the moving trailer starts to have a pendulum effect, and has been known to flip the towing vehicle.
- Consider fitting an anti-sway device and remember that imbalanced loads and high centres of gravity have greater effect on sway
- Trailer snake or sway is nearly always caused by excessive speed, and once it starts it is difficult to regain control, decelerate gently and avoid braking if possible until the combination is in a straight line.
- Always check the security of the load after any incidences of trailer snake /sway
- When arriving at or leaving a regatta field allow for the extra undulation of the surface, have a crew member watch you over any particular rough areas.

The above list is not exhaustive but is intended to sow the seeds of awareness in all trailer drivers. This brings us to the 3rd phase.

After the journey

Maintenance

This section deals mainly with those elements of trailer driving that are often neglected.

- After each trip / use of the trailer, make a point of inspecting all items as though you were starting another journey, this way any defects that may have occurred during the journey will be identified and hopefully dealt with

before the next event.

- Check tyres and lights and report any defects preferably in writing
- Have the Secretary or other responsible Club official produce or write a check sheet for completion by the driver
- Appoint a responsible club member to take charge of the trailer and its maintenance, *(you probably already have a system in place for boat damage / repairs so why not the trailer?)*
- Inspect all securing straps after unloading and quarantine any defective or damaged straps
- Remember that the trailer requires just as much maintenance as the vehicle, Service the trailer at the same time as the vehicle and keep records of each.

We hope that this document will be of some use to you and help you consider the safety implications of driving with trailers, as said before it is not an exhaustive list, but is intended to promote thought and awareness into what is potentially the most dangerous part of our sport.

Take Care and Drive Safely

Ray Mallett

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