

# Setting Up The Trailer Properly

Some boatowners have a problem getting their boats to come up straight on the multi-roller trailer; others can't get the boat off the trailer without a bulldozer pushing it; some trailers sway uncontrollably. As Editor Peter Webster explains, all these issues can be resolved by getting it set-up correctly in the first place.

**B**oat trailers have come a long way in recent years. Today, there is no reason why a boat trailer shouldn't be a delight to handle, launching and retrieving the boat easily, quickly and without the dramas we used to have in the old days.

Back in the 1960's and 1970's, boat trailers basically consisted of 5 or 6 keel rollers and a couple of side bearers, covered with either strips of carpet or rubber.

With the side bearers sticking to the hull like glue (or rubber!) launching the boat was sometimes a nightmarish event, and actually gave rise to a very popular push-bar system invented by the Tinka people in the 1970's. With this gadget, the winch wire was used to cleverly wrap around a pulley before attaching itself to a 600mm push-bar. As you turned the winch handle, you pulled the wire back into itself, thus pushing the bar out against the boat on the trailer.

For many people this was the only way you could launch a substantial boat and thousands of Tinka trailers were made with this device on as many Haines Hunters (in particular) sold through the 1970's and 1980's.

As most readers are aware, many of these craft are still in use today, and the push-bar system itself is commonly seen around launchramps, mainly because some of those trailers have endured right through to the new century, and are still providing valuable service to their boatowners.

But modern trailers slowly changed, especially those built in the post 1990's era when the industry generally adopted the practices established principally by Ian Mackay with their first series of up-market, multi-roller trailers.

To Mackay must go credit for

popularising the notion that people were prepared to pay an additional premium for a better quality trailer.

Mind you it didn't happen overnight, and I'm sure Ian Mackay would be the first to say that there are still pockets of resistance left in the market-place from boatowners who resent having to pay for a better quality trailer.

This brings us back full circle. Today's boat trailer is a pretty good piece of equipment. Just about everything is galvanised, including the working springs, a technique that wasn't available to us until quite recently. Trailers are generally more rust proof than they've ever been, they're fitted with infinitely better roller systems, and there is now a definite demarcation between the type of trailer you have or need for a fibreglass boat to the sort of trailer you should have for a pressed aluminium boat. Just to take this point a step further there is now a growing consensus, that the larger, heavy duty plate alloy boats, especially those in the 7.0-8.0m range, don't need any rollers at all – most are now being built as "skid" trailers where the boat comes onto longitudinal bearers capped with teflon. We started using this technique with *Dusty Rover*, our 4.5 tonne sports cruiser about 8 years ago, (for 3 years, too) and right into 2009 with our 8.2m cruiser, *Far-Away*, with unqualified success.

It is easier to launch and retrieve these big trailer boats – a job that takes literally a few seconds either way – than it is to launch and retrieve many 5.9m pressed tinnies!

People at the launchramp are agog when they see Ruth Cunningham drive these huge 8.0m, 3.75 tonne rigs onto the trailer and see the whole rig rise out of the launchramp in a few seconds,

whilst they're still struggling to wind on their tinny.

This is about making a decision that concerns the strategy or technique you're going to use for setting up the trailer to launch and retrieve properly. But first, let's have a look at some of the more fundamental issues concerning how the trailer should be set up, and conclude with a look at the choices in the systems employed to launch and retrieve the boat.

## Coupling Weight

Before anything else is tackled, the first matter concerns setting up the trailer so there is sufficient weight on the tow vehicle's tow bar to ensure the trailer does not start tail wagging or wandering about behind the tow vehicle.

This can be a very frightening and often uncontrollable sensation.

It is invariably caused by the boat trailer having insufficient weight on the tow bar coupling.

The best rule of thumb in smaller craft is to put as much as 10% of the BMT weight of the rig on the tow bar coupling. In other words, if it's a one tonne BMT package there should be at least 100kg on the drawbar. Two tonnes should be around 200kg – and so on.

Now if you think this is excessive, then please bear with the writer. We have conducted dozens of experiments with this situation and we have yet to find a single exception to this rule. Yes, as the weights increase in total, the 10% loading can be pared back to around 5% so that in the case of our big *Dusty Rover* for instance, we don't have 450kg on the drawbar, but we do have around 300kg to ensure we have suitable down force on that coupling.

Many boatowners, and sadly, many



**Above:** How simple, how much easier it is to hitch up the boat if you can just walk down the walkway provided. Note paired rollers holding the stem in position. Because of the keel extrusion all tinnies use - the boat must come up between the pair of rollers.

**Right:** As a multi-roller trailer (like this beauty from Oceanic) comes from the factory, the multi-roller arms invariably need adjusting to suit the hull - and in particular, the planing strakes. Ideally, the rollers should never cross the strakes, and just run on the hull 'flats'.

**Below:** Ocean beach launching is tough on the crew and the trailer; you've got to know what you are doing, or the consequences could be disastrous. Even 'soft' launches across the sand into rivers and estuaries can be difficult. This is a clever set-up using the easily fitted, swing away, extended drawbar technique. All sorts of difficult launching places can be simplified just by keeping the tow vehicle out of the water, or the soft sand, or slippery slime . . .

