

HYTHE (SOUTHAMPTON)SAILING CLUB GUIDANCE NOTES FOR CRUISER TRAILERS

Basic principles

Every cruiser trailer should possess the following basic attributes:

- Adequate strength for supporting and moving the boat.
- A steering mechanism, preferably capable of being locked when on the slipway.
- Guide posts correctly positioned and sufficiently strong to restrain the boat during recovery.
- A means for locating the boat in the correct fore-and-aft position and holding it there.
- Adequate stability to prevent tipping of both trailer and boat (sideways or fore-and aft)

Strength

Each cruiser owner is responsible for the adequacy of his/her trailer. This involves choosing or designing a trailer with adequate structural strength, and then maintaining it by painting, replacing rusted steel or rotten timber and whatever else is necessary to ensure that it remains safe to use.

Steering Mechanism

There should be a locking pin or similar mechanism to ensure that the trailer runs straight when on the slipway and partly submerged. Guidance by ropes to the steering arm is much less satisfactory.

Guide posts etc.

At Hythe, cruisers may be launched and recovered under fairly rough conditions, typically caused by SE winds and/or shipping wash. During recovery, it is often necessary to drive a cruiser firmly into its trailer while its hull is being rolled and pushed by wave action. In these circumstances, the trailer must provide a snug, strong 'dock' to hold the cruiser while it is being moored to the trailer before being hauled up the slip. The impact forces have been sufficient to break weak guide posts.

The guide posts must fit the boat fairly closely and for a fin-keeled boat there must be a means of fitting buffers or fenders on both sides so that the boat is held in the centre and will stand dead upright. If there is any lateral slack, the boat is likely to rest against the leeward guide posts and then 'flop' the other way when it is out of the water.

Unless the guide posts are very strong, each fin-keeled cruiser should be supported by additional screw struts to its bilges. These are fitted as soon as the boat is clear of the water and before it is moved along the roadways.

Fore-and-aft positioning

When a boat is being hauled up the slip, it may sag backwards and settle further aft than intended. This is partly caused by slack or stretch in the mooring ropes and also because the toe of the keel makes initial contact and the boat then rocks back as it settles on the sloping trailer bed. The best way to ensure correct positioning is to equip the trailer with a stop board or similar device. The keel is then driven firmly against the stop and the forward mooring ropes tautened to minimise any sag-back.

Alternatively, if a keel has a gradually sloping leading edge so that a stop device is impractical, it is essential to identify marks or fittings on the boat that can be lined-up with the guide posts when the boat is in the correct position. The boat must then be held there by strong, taut warps.

NOTE. If guide posts and stop devices are to be installed correctly, the owner must obviously know the dimensions of the boat (including position and profile of keel). When a new cruiser is brought to the club, the owner must ascertain that information in order to carry out the work properly before the first recovery. The dimensions might be obtained from design drawings, by measuring an identical boat or by beaching the boat (perhaps at scrubbing piles) and taking measurements of the underwater hull. Do not rely on hope and guesswork because that may be hazardous and if a boat clearly does not fit its trailer the tractor driver may refuse to recover it.

As an extra precaution, keel-supporting areas should be covered by timber or plywood, so that steel keels do not rest on steel supports. If anything goes slightly wrong during recovery, steel-on-timber contact is likely to slip less than steel-on-steel.

Stability

Sideways tipping of a boat within its trailer is most likely for a fin-keeled boat between guide posts that are too widely spaced, and this risk should be addressed as described above.

Fore-and-aft tipping can occur if the keel overhangs the trailer bed, or if the transverse bearers are widely spaced and leave one end of a keel unsupported. (NB. In some cruisers, the centre of gravity is not over the middle of the keel but is closer to either the forward or after end). Fin-keeled cruisers with short bearing areas to their keels may also rock alarmingly while balanced on that small area, particularly if crew move around on deck. This should be prevented by mooring the boat to the trailer with taut warps until the supplementary screw struts can be fitted.

Road trailers

Close-coupled 4-wheel road trailers are difficult to steer within the compound, particularly when manoeuvring cruisers into narrow spaces. Both 2- and 4-wheel road trailers may also be problematic during recovery operations because frequent rough conditions mean that it may be unsafe for the owners to enter the water and manually position the boat on the trailer. If such a trailer is to be used, it should be fitted out so that it possesses the same characteristics as the other club trailers. As a minimum, this should include:

- a. Guide posts on both sides, correctly spaced, so that the incoming boat slides into the centre, with its hull and keels between the wheel mudguards and its keel(s) or other bearing surfaces accurately above the keel channels or other supports.
- b. A post at the bow with a V-buffer above water, so that the boat can be positioned accurately fore-and-aft by driving the bow into the V and holding it there with taut mooring warps. (Note that a bow support below the hull is not suitable because it does not provide accurate positioning.) There must be an above-water strong point in a suitable place for securing those mooring warps to the trailer.
- c. Temporary blocks under the rear corners of the trailer frame, to create minimal ground clearance in case the boat/trailer combination tips backwards while on the slip, or if anyone absent-mindedly walks into the cockpit before the trailer is connected to a vehicle.

General note on responsibilities

Every owner is totally responsible for their trailer, for the trailer being correctly designed for the boat, for both being properly maintained and for the boat being accurately docked and secured on the trailer.

Tractor drivers are not responsible for inspecting trailers. However, any tractor driver who observes apparent faults which might preclude a satisfactory launch or recovery may decline to proceed with that operation. The onus is upon the boat owner to demonstrate that the equipment is adequate.

Summary of essentials

1. Sufficient strength and proper maintenance
2. Controllable steering
3. Robust guide posts, correctly spaced (plus bilge struts where appropriate)
4. Stop board (or equivalent measures)
5. Continuous keel-bearing surface(s), long enough to allow for some slip-back.

For extra information on guide posts etc., refer to the club's guidance notes for CRADLES.