

June 22, 2016

SeaWind COA Class Rules

Seawind Rules question posed by a skipper:

“From the beginning the joint in the mast has been slightly loose and hence the mast is not straight as the top portion leans aft a couple of degrees. This causes a crinkle in the sail from that joint diagonally aft and down to the grommet. I know the rules state the provided joiner must be used. What fixes to this situation are legal? I know a small #2 sheet metal screw at the front of the mast into the joiner above and below the joint would probably do the trick, but is it allowed? If not, what is and what works to correct this situation?”

SeaWind mast joiner

The mast joiner comprises a piece of copper or copper alloy approx. 4” long which is shaped to fit the interior of the Aluminum mast sections. Half is slid into the top mast section and secured by the spreader retaining screw, the remaining half is slid into the bottom mast section to provide a secure joint. When properly located the joiner stiffens the center of the mast to assist control of mast bend. In previous kits, replacement mast sets and in most Readysets the mast joiner is a tight fit in both halves of the mast. It is usually necessary to squeeze the sides of the joiner together to get it to start to slide into the mast section so that when slid completely in it provides a tight fit all along its length.

Proposed alternative mast joiners

Some years ago a proposal surfaced to allow use of alternative mast joiners such as a carbon rod or tube. This proposal was rejected for two main reasons:

1. Potential impact on mast bend performance - A lighter joiner of the same length reduces spar weight while a longer, lower density joiner of the same weight would stiffen the mast over a longer distance. Both options could produce variations in stiffness in the center of the mast resulting in slight differences in mast bend characteristics impacting performance.
2. Inspection problems – In the event of questions at an event it is relatively simple for a Race Official to inspect the mast joiner to determine if a standard joiner is present by releasing the shrouds on one side plus the main halyard and slide open the mast sections enough to see if it is copper and hence standard. If alternative materials were allowed it would be necessary to dismantle the mast altogether to see what length of joiner was used.
Rules 2.1 and 8.2 require use of the Kyosho standard mast joiner.

Loose mast joiners

A few reports have surfaced that some of the new Readysets have come with the mast joiner loose fitting in the mast sections. Previously this occurred only when a skipper was over zealous in closing up the joiner to more easily enter the mast section. Too aggressive use of pliers to close the gap will have this effect! It is entirely possible that the unskilled assemblers of the Readysets have made their job

easier by closing the gap too much before inserting the joiner. One option to improve the mast joiner fit is to remove the joiner from both sections and carefully open up the gap between the sides uniformly over its length so that it is a tight fit and replace it.

Proposed use of two screws above and below the joint to secure the mast joiner to the mast sections

The idea is to drill two holes into the mast section and joiner when closed up and securing with small sheet metal screws the heads of which would be located on the front of the mast. It is the unanimous opinion of the Class Officers that this modification should be allowed if the previous option does not provide a satisfactory solution. No performance advantage is expected from this modification!

This Rule Interpretation will stand until April 1, 2017. If deemed necessary a proposal for a permanent Rule change will be included in the Class Ballot due at the end of 2016 for Membership vote.

Diagonal sail crease from main clew to spreaders

The diagonal crease in the main sail due to too much mast bend, mentioned by the skipper, is certainly exacerbated by a loose or weak mast joiner. However it is also caused in normal mast setups by overtightening the backstay or not tightening the lower shrouds enough. Skippers who are used to boats with topping lifts which use a high tension fore and backstay to allow the topping lift to function properly don't realize that the SeaWind is designed as a low tension rig. Backstay tension in very light winds is zero or slack. Tension is increased as winds increase but never to the extent of causing too much mast bend. Therein lies the art of tuning a SeaWind as the Summary Tuning Guide and Doug Lanterman's full article elaborate on.

Mike Eades

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