

Boating Tips

Prevent Rigging Failure

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Sailors, particularly those keeping boats in salt water, must be extra vigilant in checking their boat's rigging. BoatUS and other insurers pay out tens of thousands of dollars in claims for rigging failure, masts falling, injuries even death.

All rigging components should be stainless steel, specifically the higher quality, stronger and more expensive AISI 316 stainless steel. Some boat manufacturers believe they are buying 316 when they are not. To cut cost unscrupulous boat and part suppliers may pass off other metals as 316 stainless with the cheaper 304 stainless steel. A few pass off nickel or chrome plated iron or another plated alloy as 316 stainless steel. For rigging components including the wire, demand 316 marine grade stainless steel.

The first point of rigging failure is the forestay, backstay then the failure of shrouds. I learned that these wires keep the mast upright. Saltwater and salt air enter various components such as the swag stud, the part holding these wires. Here salt water boils in the sun, concentrating salt to corrode the stay and shroud wire or swag stud. The wire either pulls out of the stud or breaks, the mast falls.

A sailor I know experienced a forestay failure yet the roller furling configuration, fortunately, kept the mast upright. This same sailor purchased a used boat that had no forestay. The previous owner thought the roller furling was enough. He had the previous owner add a forestay before my friend accepted delivery.

Other rigging points to inspect are the chair plates, every through-hull rigging point as well as the mast's rigging points.

Sailors usually can't inspect the chain plate and mount below deck because of the interior. Make a point of doing whatever necessary, remove interior or add an inspection door, to enable thorough inspection. *Soundings* suggests inspection below deck every ten years. They recommend more frequent inspection of older boats or those subjected to long hours of sailing such as trans-oceanic boats. Those sailors inspect after each crossing leg or every few thousand miles.

Another cause of rigging failure, albeit infrequent, is hull failure due to water intrusion. Water enters under bedding or through hull mounting screws, wetting thus weakening the core. The strain of the rigging eventually pulls the mount out of the core soaked hull.

Use a plastic hammer or mallet to sound suspect hull areas. A dull thud versus a ring indicates a wet hull. Don't delay hull repair in rigging mount areas.

Then, while most sailors are diligent in checking deck rigging, they fail to inspect rigging above deck, on the mast itself. While not as susceptible to direct salt water, it nonetheless sets in the salt air, thus also requires inspection.

Also, replacement is often the only inspection method. Consult with an authority such as BoatUS about the average life of specific rigging components, then replace them before their EOL (end of life).

Keep your mast upright and your sailboat sailing. Inspect its rigging on a schedule then repair or replace as needed with 316 stainless steel rigging components.

This article is given courtesy of the Pamlico Sail & Power Squadron, America's Boating Club. The Squadron is offering a 2-1/2 hour Sail Trim & Rig Tuning Seminar on June 16th. To learn more, email Linda, our Education Officer at psps@gmail.com or contact her at 252-964-3009. Remember, FREE Vessel Safety Checks are available. Contact Fred at VSC@pspsnc.com or call him at 948-0682 to schedule your inspection..