



Preparing Your Mast

by Mark Reynolds

Before you step your rig next time, take a minute to check a few things out. You should look it over to help prevent any potential problems and there are a few adjustments to check. You don't need a failure that may put you out of a race this season. A few millimeters can be all there is between having your mast standing or letting the wind and gravity bring it right back down.

Your mast can be slightly bent from last season, and the spreaders and intermediates may have moved since the last time they were checked. With the Star sailing season just starting up for many, it's a good time to check your rig and make sure that it's ready.

Tuning: Today's new masts come pretty ready to go. The mast manufacturers do a good job of presetting the spreaders and the intermediates. A few days of good pressure can seat things a bit, so even a new mast should be rechecked. If you have a season or two on your mast it's way past time to check your settings. I check mine quite a few times throughout each year. Check to make sure that your mast is straight. Small adjustments are easy, particularly at the top where the welding has made the mast less resilient. If you are careful, you can straighten a mast that's been very bent.

Before the 2000 Olympic Trials, we rolled to windward and dipped the pole in the drink for a few seconds. As soon as it hit, Magnus pushed the inboard end up the mast. Although the mast didn't break, it was pretty bent up. We were able to straighten bends that were both sideways and fore and aft.

Assuming that your intermediates are at the spreader tips, they need to be adjusted before attaching them to the spreaders. Pull the upper shroud down along the front of the mast and mark the inside bearing point on the mast. If you have a Spartech, make sure to leave the small spacer in. You can put a phillips screwdriver through it to hold it in place and make a mark in line with the lower edge. Measure down from this point $2 \frac{15}{16}$ " (75mm) and make another mark. Now pull the intermediates down and adjust so that the inside bearing point is in line with this mark. Make sure you tighten the locking nut. After installing the spreaders, tie some twine or shock cord tightly between the tips (right around the shrouds) and measure to the back of the mast, checking the sweep of the spreaders. This normally comes at 5" and this works fine.

At this point I also make sure that the line from tip to tip is perpendicular to the side of the mast butt plug. This can be checked by using a level or you can line up a batten on the butt plug and check

to see if it's in line with the twine between the spreader tips. If you haven't checked this for a while it will most likely need a little adjusting.

Maintenance check your mast head sheave and halyard lock. They normally don't have problems, but make sure that the pin that holds them in is secure. The lower pin that holds the halyard lock also holds the upper shrouds. (This pin broke on Peter Bromby at this year's Springs.) Take a very close look at the main halyard at the shackle and at the ball to make sure there are no broken wires. This should be replaced at least every few years. You should take off the jib box and check all of the screws inside and make sure that they are tight. Check the half sheave that the jib halyard runs around. If you haven't kept the jib halyard waxed it will wear out quickly (don't forget to wax it!). Before reinstalling, check all the screw holes.

Last year, before the trials, I found a crack from the top screw hole into the cutout. It was starting to crack from the hole toward the side as well. No question that it would have broken soon. Look around the spreader bracket and make sure that it's still tightly riveted to the mast. If not, you can re-rivet it using stainless rivets. Make sure when riveting anything to your mast to use something to insulate it. I use Alumiflastic. If you have a collar around the mast, as was used on many Follis, make sure that there is still a piece of plastic under it to insulate it from the aluminum mast. I've seen quite a few masts break off at this point. Wipe the wires off with some MEK or acetone. It's a good idea to replace the rod rigging occasionally. I've seen wires break within 1 year-- and have seen them last for many years. The intermediates and headstays seem to break the most, and fortunately, neither usually causes a broken mast.

The lower diagonal shrouds and the outer lower cap shroud are more critical. Check the shock cord that's tied from backstay to backstay near the spreaders. This should still have some stretch left in it and be about 6' long. If it's too long, the leeward backstay can get caught around the spreader tip on a jibe. I've been putting Starbright on my mast to keep it from getting dirty, and spraying some McLube in the sail slot to make the sail move up and down a little easier. With the Spartech masts make sure to tape your spreader tips before standing the rig for two reasons: the bolts have been known to back out and they are also a bit sharp, which has ripped many mains at starts and mark roundings.