Rig Tuning Advise

Single Spreader Masthead Rig

Fore and Aft Tune

- Mast rake is determined by forestay length. Rake affects helm balance - raking the mast increases weather helm. As a starting point, use the designed rake on the sail plan (ask the boat designer, not the mast maker). If no information is available, start at 1:30.(e.g., 50 cm rake on a 15m mast).To measure rake, tension the backstay approximately 60%, then check rake with a weight attached to the main halyard. (Boat must be floating level when you do this!). Adjust forestay as necessary to obtain the desired angle.
- A certain amount of pre-set mast bend is desirable, to stabilise the middle part of the mast and thus minimise rig pump in a seaway. With a masthead rig, mast bend can be induced by tensioning the forward lowers (if fitted), or baby stay (if fitted).

Transverse Tune

- Centring the mast in the boat.
- Ensure backstay and upper shrouds are relatively slack (to minimise mast bend).Use the main halyard to measure from the masthead to the chainplate each side. Adjust upper shrouds to get identical readings each side.
- Setting up the shrouds
- In the dock - tighten the upper shrouds evenly as tight as you can by hand with a 25cm wrench. The lowers and intermediates (if any) should be fairly slack, or just tight enough to keep the mast straight.
- Tension the uppers - Sail to windward in about 15 knots of wind. Tighten the leeward upper shroud (note the number of turns required). Tack back and forth, adjusting each side equally, until the leeward uppers are snug (no excessive slack), with the boat heeled at 20 degrees.
- Tension the lowers- tension the lowers until the mast appears straight (transversely) in 15kn wind. If the mast has double lowers, the forward lowers will normally be tighter than the aft, as the forward lowers provide most of the lateral support and may be used to induce a small amount of static mast bend. The aft lowers will limit any excessive bend and will prevent fore and aft panting in the middle section of the mast. At the dock, the lowers will be looser than the uppers, and even looser when sailing. A baby stay provides similar support to forward lowers.