

# 420 Rig Setup

How to measure mast rake, rig tension, pre-bend,  
jib height

# Rig Tension

- Pull on tension with the jib halyard purchase system.
- Measure your tension on the shroud.
- 420s start with 30 on a Loos gauge and 27 on a Super Spar gauge.
- You can experiment to find what tension works best for you.



# Mast Rake

- First hoist your tape measure to the top of the mast on the main halyard.
- Then hold the tape against the mast band at the boom. The tape should read 16' 1 1/2" (4915mm) at the top of the band at gooseneck.
- Now take the tape to the top centre of the transom. This is your mast rake measurement. Rake one is between 20' and 19' 11 1/2".
- Rake 1 is your most upright setting



A tip to make mast rake measurement easier. If you hoist the tape to 13 1/2" the measurement at the transom will read 5' for a rake of 20'. This is a good tip, especially when it's windy, as it reduces the windage on the tape and makes for a more accurate measurement.

# Pre-bend

- With the **rig tension applied** and the **mast chocks removed** pull your main halyard tight down to the back of the mast at the gooseneck.
- With your crew standing on the foredeck they can measure from the back of the mast to the halyard, at spreader height with a ruler.
- This is your neutral pre-bend and will appear on your sailmaker's tuning guide.





# Jib Tack Height Set up

- The ideal position for rake 1 is to set the tack corner level with the top of the swage on the luff wire. This is a distance of 75mm from the tack pin to the bottom of the jib.
- The ideal height setup for Rake 2, 3 and 4 is a little higher.
- These settings will give you the correct sheeting angle for each rake setting.

