

Your new Doyle genoa is designed and engineered to be easy to set and trim. Fundamental principles of genoa sail trim are outlined in this guide. The genoa is the primary driving force. Set the genoa trim first, then work the main.

Mast Tune

To achieve the best performance, your mast needs to be tuned correctly. The three major steps are:

1. set the right amount of rig tension
2. insure athwartships straightness
3. establish the correct amount of rake

Talk to your Doyle sail consultant for mast tuning advice.

Halyard (Luff) Tension

Hoist the sail initially with minimum (hand tight) halyard tension. Next, sheet in to proper trim for your point of sail. If there are horizontal wrinkles, ease the sheet and tighten the halyard just enough so when sheeted in properly there are only small, if any, horizontal wrinkles. Never start with vertical wrinkles in the luff. It is slow and the excess luff tension can damage your sail. With the sail loaded up, tension the halyard just enough to remove any horizontal wrinkles emanating from the luff. For record keeping purposes and to aid in setting the initial tension, mark the halyard and use numbering stripes as a reference.

IMPORTANT: Always ease the sheet when adding halyard tension. As the luff is tensioned, the leech will move closer to the spreader tip making it necessary to ease the sheet. When hoisting, don't sheet in until the sail is all the way up.

Lead Position

Most Doyle genoas are equipped with a "trim line" at the clew to be used as an aid and starting point for lead position. Simply lining up the genoa sheet with the trim line will get you very close to the ideal position. The magic of the trim line is that it will remain accurate as the sheet is eased or a turn is taken on the roller furling. Fore and aft lead position controls leech twist and foot depth. Moving the lead forward increases leech tension, thereby reducing twist and adding depth to the foot.

Set properly, the foot of the genoa should just touch the shrouds at the chainplates and be slightly creased when the upper part of the sail is 2-4 inches off the top spreader. Do not be concerned by the crease along the foot when trimmed hard, or if the top breaks slightly early. It is better to have the lead too far aft, rather than forward! To depower the sail at the upper end of its range, move the lead aft 4-8 inches from its normal setting. To power up, move lead forward from median position 2-5 inches, in conjunction with easing the sheet.

Sheeting inboard sometimes helps pointing. Sheet as far inboard as possible in ideal conditions: smooth water, medium air, experienced helmsperson and when pointing is the objective. Sheet further outboard if: the wind is very strong or very light, when using a genoa at the top of its range, or you need to foot, not point.

When reaching, the sheet lead should move forward and outboard. A barberhauler, set up with a short sheet and snatch block on the toe rail, will do the job.

Backstay Tension (Headstay Sag)

Tension on the backstay (masthead rigs) or runners (fractional rig), tightens the headstay and reduces headstay sag. Headstay sag controls overall depth in the genoa and in particular, makes the entry rounder and more powerful. Sagging the headstay is analogous to stepping on the gas pedal. Use sag for power hungry conditions – light air, choppy water, off the starting line, out of tacks or when you need to foot. Use a tight headstay whenever you are going fast and are looking to point. Reducing headstay sag flattens the headsail for maximum close windedness. For a more powerful sail, sag the headstay.

Set up a system for marking the "throw" or range of your backstay. A numbered batten taped to the hydraulic cylinder works well on boats so equipped. For split backstays, use the squeezer position relative to the stern pulpit. Keeping in mind the basic concept of increasing sag for power and acceleration, use the following table as a guideline for upwind trim:

Wind	0-5 app	5-12 app	12-16 app	16+
Backstay tension (% max)	10-20%	20-60%	60-90%	90-100%

Sheet Tension

Sheet tension affects every characteristic of the sail proportionately. Trimming the sheet reduces twist, reduces depth and narrows the sheeting angle. These changes combine to produce better pointing. Easing the sheet has the opposite effect – more speed, but less pointing ability. More than any other control, you will need to change sheet tension substantially as the wind velocity and sea state change, to achieve optimum performance.

Primary responsibility of the genoa trimmer is to keep the sail's leech the same median distance off the spreader (see table below) trimming in the puffs, easing in the lulls. Secondary responsibility is to work with the helmsperson, easing for waves, lulls or whenever the boat is slow; trimming harder when the boat is up to speed and pointing is desirable. To achieve top performance, the trimmer and helmsperson must communicate.

Use the distance of the genoa leech off the spreader as a guide upwind. Without knowing the specific characteristics of your boat, it is impossible to prescribe an exact distance off the spreaders. The following table will serve as a guide for your #1 genoa:

Wind	0-5 app	6-12	13-17	17+
Distance from spreader	8-12"	4-8"	2-4"	Lead aft 4-12"

Jib Reaching

Make sure the sheet is eased as far as possible (until the telltales flow). You should ease in every puff. Do not overtrim. Move the lead outboard to the rail and forward, so that the telltales luff as evenly as possible.

Genoa Care

- Spreaders are a genoa's worst enemy. NEVER BACK A GENOA AGAINST THE SPREADER! (90% of all structural and shape repairs are related to spreader abuse.) Tape and pad spreader ends and cotter pins carefully. Make sure the genoa has spreader and stanchion patches as necessary.
- Do not over tension the halyard. A tight luff creates a gutter, or trough along the leading edge of the sail. This is slow and will permanently distort the sail's shape. Remember to ease halyard when apparent wind velocity drops.
- Flake genoa before turtling or bagging. Do not stuff. Store dry whenever possible. Do not store wet for extended periods.
- Do your genoa a favor. Rinse with fresh water periodically to remove salt and heavy dirt. Do not leave it in the sun unnecessarily.
- Have your sailmaker periodically inspect your genoa for areas of chafe and wear. Preventative maintenance will significantly extend the life of your genoa.

For more detailed information specific to your sailboat, talk to your Doyle sail consultant.



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