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TUNING TIPS FOR THE C-15

This guide is intended to help you get the most out of your new Ullman sails by looking at each variable in the rig and sails and outlining the adjustments that have proven to be the fastest.

MAST STEP - The mast should be all the way forward in the mast step.

MAST RAKE - Measure the mast rake from the main halyard shackle and the top of the transom using a steel tape. The halyard is taken all the way up and locked.

SPREADERS - If you have a light crew and are overpowered easily, your spreader length should be 16" or 17", otherwise 18" spreaders are the best length to use. The spreaders should be angled so that the tips are 4" to 9" aft of the mast. (See diagram on page 4).

MAST PARTNER - A must. The mast partner restricts sideways mast bend at deck level.

MAST BLOCKS - Mast blocks are used to restrict fore and aft mast bend.

JIB HALYARD - The jib halyard can be a halyard lock system, or a halyard running back down to a purchase box. The rig should minimize compression and windage and be adjustable.

WINDWARD TRIM

LIGHT AIR (0 - 5 knots)

Mainsail

SHEET - Sheet just tight enough to bring the top batten parallel to the boom.

CUNNINGHAM - Cunningham should be completely loose.

OUTHHAUL - Keep the outhaul loose enough to just open up the foot shelf.

VANG - There should be no tension on the vang.

TRAVELER - The traveler should be all the way to weather.

MAST BEND - Let the mast bend freely (do not use any mast blocks).

MAST RAKE - Mast rake should be 23' 5½".

Jib

SHEET LEAD - The lead should be placed just slightly forward of trimline.

SHEET TENSION - The sheet tension should be just tight enough that the boat points well. Be careful not to stall the jib. When in doubt ease the jib out.

DOWNHAUL - The downhaul should be loose enough to keep slight wrinkles in the luff.

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WINDWARD TRIM (cont'd)

MEDIUM AIR (6 - 15 knots)

Mainsail

- SHEET - Keep the top batten parallel to the boom. In flat water the main should be sheeted in tighter than this to eliminate backwind.
- CUNNINGHAM - The cunningham should be loose enough to keep slight wrinkles in the luff.
- OUTHHAUL - The outhaul should be tight enough to close the shelf in the foot of the sail.
- VANG - The vang should be tightened to bend the mast in 12 - 15 knot winds if you feel overpowered.
- TRAVELER - The traveler should be all the way up in 6 - 10 knot winds. As the wind increases the traveler should be eased only enough to keep the boat flat. HIKE HARD!
- MAST BEND - Let the mast bend in the lighter air. As the wind increases restrict the mast with blocks until you become overpowered.
- MAST RAKE - Mast rake should be 23'7" to 23'9" - rake the mast farther forward as the wind increases.

Jib

- SHEET LEAD - The lead should be on trimline.
- SHEET TENSION - The sheet tension should be tight enough to almost curl the foot. When in doubt sheet the jib in tighter.
- DOWNHAUL - Tighten the downhaul to eliminate all wrinkles in the luff.

HEAVY AIR (16 - 30 knots)

Mainsail

- SHEET - Sheet just loose enough so that the boat is not overpowered in the puffs. The traveler, not the mainsheet should be used in gusts.
- CUNNINGHAM - Tighten the cunningham to eliminate all wrinkles in the mainsail luff.
- OUTHHAUL - Tighten the outhaul all the way out to the band.
- VANG - Tighten the vang to bend the mast and flatten the sail if needed.
- TRAVELER - The traveler must be played constantly to keep the boat flat and moving.
- MAST BEND - Restrict the bend if the main is overly distorted (large creases running from clew to spreaders), but otherwise let the mast bend to flatten the main.
- MAST RAKE - The mast rake should be 23'9" to 23'10".

Jib

- SHEET LEAD - The lead should be positioned just aft of trimline.
- SHEET TENSION - Ease out 1" from medium air trim. Both the main and jib should be luffing slightly in heavy air for good boat trim.
- DOWNHAUL - Tighten the downhaul to eliminate all wrinkles.

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REACHING AND RUNNING - ALL WINDS

Mainsail

SHEET - Sheet on the edge, but never luffing (except in survival conditions).

CUNNINGHAM - Ease the cunningham completely.

OUTHHAUL - Ease the outhaul so that the shelf is totally open.

VANG - The vang should be just tight enough to keep the top batten parallel to the boom.

MAST BEND - Restrict mast bend to make the main fuller. Adding more mast blocks on a close reach will give you a more powerful main and stop the jib from flopping around.

MAST RAKE - The mast rake should be 23'11" to 24'0". It is always faster to have the mast raked farther forward offwind. This means loose shrouds in most conditions.

Jib

SHEET - Sheet the jib in the same manner as the main. Do not allow the jib to luff excessively.

SHEET LEAD - The sheet lead should be the same as it was when beating. In lighter air the crew should hand hold the jib so that it luffs evenly.

DOWNHAUL - The downhaul should be completely off.

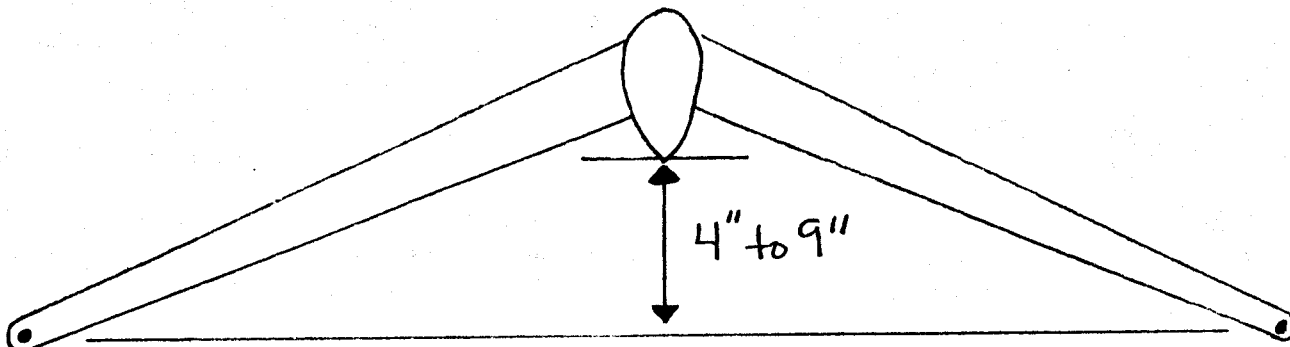
WHISKER POLE - When reaching, do not set the pole unless you are positive that it will be faster. Broadreaching, pull the pole aft until the jib leech begins to curl, and then ease it slightly forward. Running, be careful not to oversquare the pole. When in doubt, ease the pole forward.

POTPOURRI!

TOP BATTEN - Tie the top batten in tightly in heavy air, and loosen it slightly in lighter air.

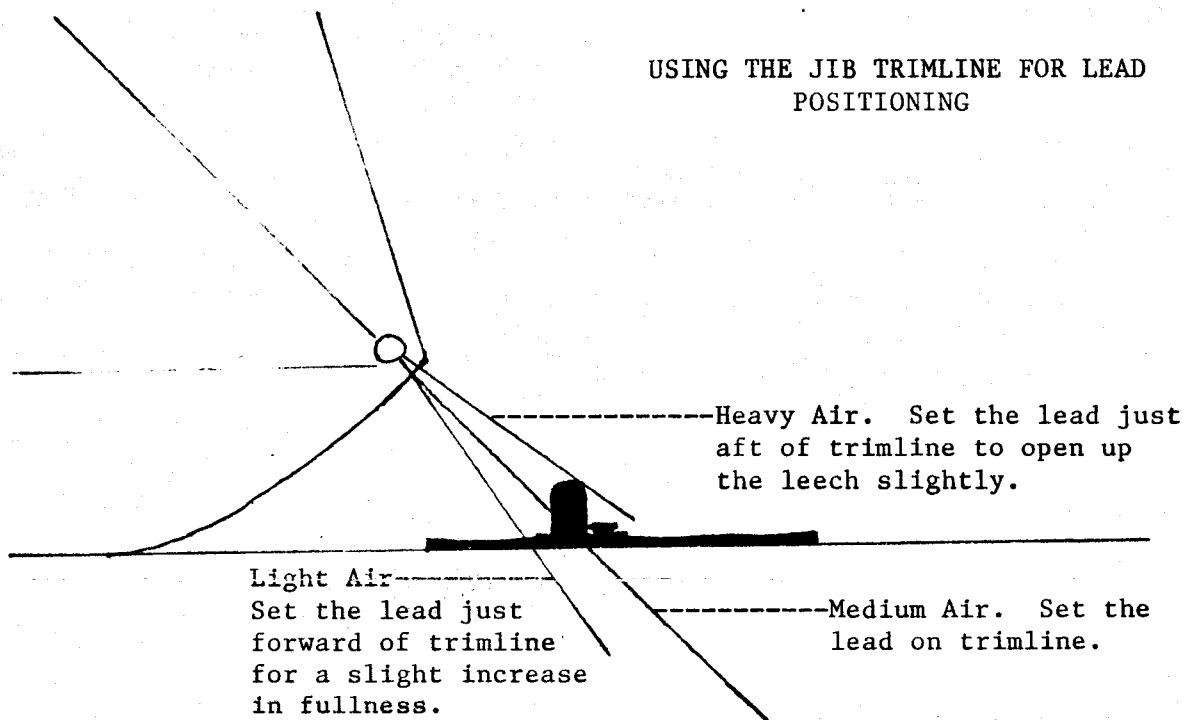
JIB HALYARD - Downwind in very light air tighten the halyard to rake the mast forward, because there isn't enough wind to do the job.

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SPREADER ANGLE - Spreaders angled back a full 9" will allow a lot of mast bend, which is good for light crews. If only 4" of sweep is carried the mast will be quite stiff, which is better for heavier crews. A measurement of about 6" is good for most crews, and this is a good starting point and can be changed later on if it seems necessary.

USING THE JIB TRIMLINE FOR LEAD POSITIONING



Remember that these suggestions are generalizations, and cannot cover every possible situation. Each of us must find out what works best for our situation through the best testing ground, competition. We are open to your suggestions, comments and questions concerning the tuning of the C-15. We are always looking for new ways to make the boat go faster. After all, that is part of our service to our customers.

Thank you, and good sailing!