

## THE BALANCE BETWEEN SAIL CUT, BOOM ANGLE & HALYARD TENSION

The Leisure Furl™ mainsail should furl evenly with the boltrope in the luff remaining below the feeder as it furls. The boltrope should lie forward or aft of the previously rolled layers.

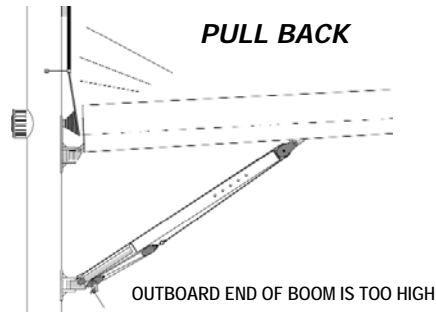
Each of the three conditions shown below are caused by incorrect boom angle, the tension on the halyard as it is tailed and the cut of the sail. 87° is the prescribed mast/boom angle. However, this angle may need to change slightly to accommodate the cut of the sail.

Consistent tailing tension should be kept on the main halyard during the furling process. Too little, or too

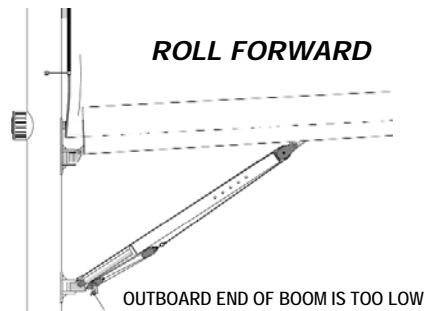
much tension on the halyard can exaggerate the direction the sail rolls. If the boom angle is not tuned to fit the sail, incorrect halyard tension will worsen the problem.

This balance should be attained and practiced at the dock. Be confident in hoisting and furling prior to setting sail.

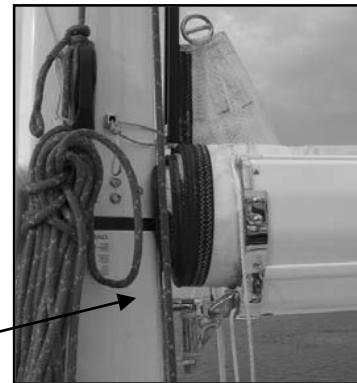
**Topping lifts, vang lines and halyards can be marked to assist in locating boom angle and reef point batten locations.**



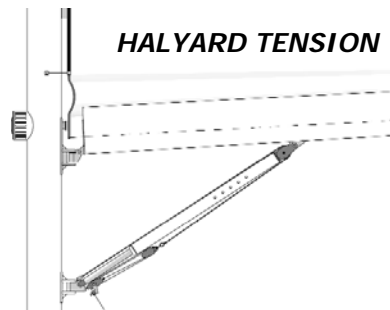
**Correct Wrap Offshore**



**Incorrect Wrap Sail Rolling Forward**



**Luff Tape Rubbing Against Mast**



# Quick Reference Guide

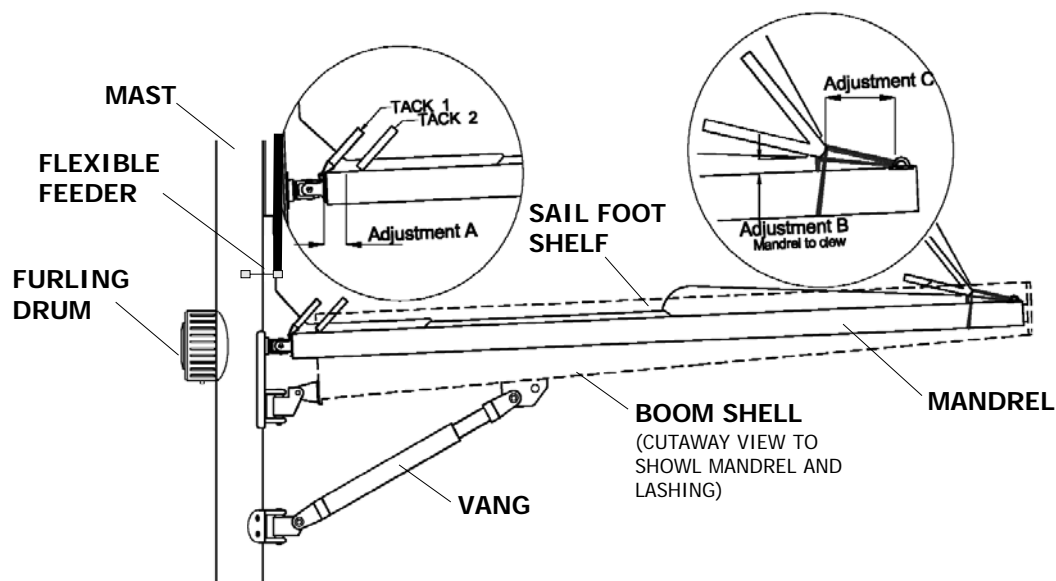
## Offshore Model

### System Operation

- Retract the sail cover completely to allow for full hoist.
- Set the boom to the correct furling angle.
- Hoist the sail with the halyard while tailing the furling line.
- To flatten the foot of the sail, take in the furling line which rotates the mandrel, furling the shelf and tensioning the tack and clew lashing lines.
- For a fuller shaped foot, ease the furling line, allowing the shelf to unfurl.
- To reef the sail, set the boom angle, haul on the furling line while snubbing the halyard. Lower the sail to a batten location and secure the lines.
- To furl the sail, set the boom angle, haul on the furling line while snubbing the halyard. Assure that the sail furls tightly and correctly onto the mandrel.
- When the sail is completely furled, deploy the sail cover by pulling it forward.



## Sail Fitting



1. With the sail laid on the port side, lift the foot up to the furling mandrel, then slide the foot boltrope into the track, from either forward or aft.
2. Attach first the tack to the furling mandrel, leaving around 1/2" between the tack web and tack ring on the universal, see adjustment A.
3. Now lash the clew to the outhaul saddle, see adjustment C. Do not pull the foot out tight. leave fullness in the foot for efficient downwind sailing. The in-built sail controls will generate outhaul tension.
  - Tack and clew lashing should be done as shown. The lashing should be loose enough so as to allow mandrel rotation to furl the shelf of the sail foot to flatten the sail.
  - Take note of the lashing dimensions at the tack and clew so the sail can be replaced correctly if it must be removed.
4. Lash also the clew to the furling mandrel, using a separate lashing, pulling the clew within 1/2" of the mandrel, see adjustment B.
5. Using a winch handle inserted into the drive gear, roll the sail onto the port side of the mandrel. (We recommend two persons assist by pulling either the luff or leach, so as to ensure the boltrope remains in the area between the boom edge and the mast, whilst the sail is being furled).
6. In some special cases, hoisting the sail from the deck may be preferred, as the spool and boom height from the deck may inhibit manual fitting. In this instance the furling line will need to be pre-wound on the spool before the sail is attached, and the boom set to the correct angle for furling before the sail is hoisted.
7. With the sail rolled fully on the mandrel, fasten one end of the furling line to the spool, by firstly placing five turns around the spool drum in an anti clock wise direction, looking aft, then pass the free end through the hole in the spool. Tie a single knot as close to the end as possible, and push the knot into the counterbore of the spool drum.

## Sail Fitting & Flexible Feeder Setup

### Flexible feeder Setup

The limit line assembly consists of two stainless steel termination blocks and a fixed length of Spectra™ line which passes through the eye on the forward face of the luff feeder.

The termination blocks have been installed on the mast, port and starboard blocks at an equal distance from the aft face of the mast. The limit line should be loose enough to allow the track to flex to port and starboard but not aft.

Each installation is a little different, and the desired amount of flex has to be determined by hoisting and furling the sail. The furling operation should be done several times with eyes on the luff of the sail. Ensure that the 87° boom angle is correct, then watch as sail the rolls into the boom. Furling should be checked at different angles to the wind, since this is the true test of the flexible feeder setup.

Once the termination blocks have been installed on the mast, the only way to effect the amount of flex in the unsupported portion of the luff track is to change the length of the limit line. If less flex is deemed necessary the line can be shortened. If a longer line is required for additional flex, Spectra™ line can be purchased from your local chandlery. Use a figure eight stopper knot in each end then trim the ends as necessary.

