

## **LEHMAN 12 TUNING GUIDE**

The following are a few rigging changes that will make your Lehman easier to sail. They are listed in the order of importance.

1. Minimize the mainsheet length to reduce tangles and excess weight. 34' of 5/16" line is about right. It is best to use a polypro line like Melges Braid, Yale Light or Marlow Polypro to save weight when wet. This helps most on a light air run to keep the boom out.
2. Put yarn on the shrouds to see wind direction off the wind.
3. Wax halyard. The halyard goes through a stainless tube so some wax on the halyard makes it work better as well as make the tube last much longer.
4. Modify outhaul. The clew of the sail must be kept close to the boom, with the simplest plan being to add a small line from the outhaul shackle around the boom - Laser style. You can also put a track on the boom for the outhaul. Convert to a 3 to 1 purchase for adequate adjustment capability.
5. Move the downhaul aft in the boat for the skipper to adjust. This is more important when your crew is not as experienced. The location next to the shrouds works well for both the skipper as well as the crew.
6. Move vang adjustment aft. This allows it to be eased on the run to get the boom all the way out.
7. Add a mast puller. This will hold the mast forward when hitting chop with the leeward lever off.

While the Lehman is a very simple boat, there are always a few tuning variables that are important to get the best speed. The following are some suggestions to help you get top performance from your Lehman and your new Quantum Lehman sail. Please call Mark Reynolds or George Szabo if we can be of more help.

### **RIG TUNE**

Set up the diamonds fairly tight and check the mast to see that it is straight. Make sure you tape the end of the spreaders so the shroud can't get caught on the tip. A good starting place for the shroud adjustment is the third hole from the pivot of the lever. The headstay should be tight enough so when the shroud levers are down there is some tension on the rig.

## BODY POSITION

In most conditions the skipper and crew will sit on either side of the thwart. In light air the skipper may have to lean over the thwart some to keep the boat balanced fore and aft. The bow should be just kissing the water. Upwind when there is enough wind the crew should balance the boat so the skipper can sit on the rail and concentrate on steering and tactics. In stronger wind both must hike out to keep the boat as flat as possible.

## UPWIND SAIL TRIM

**Downhaul-** After the mainsheet, the downhaul is the most important adjustment. After raising the main feed the boltrope at the tack back into the mast. Lower the halyard slightly if the rope comes out of the mast when the downhaul is released.

Adjust the downhaul to keep the sail shape correct in changing conditions. It is better to be too loose than too tight if you are unable to adjust the downhaul often enough.

Light air- Use little or no downhaul. This is because in light air you want to keep the fullness in the sail to stay back as far as possible. In light air you want some horizontal wrinkles.

Medium air- Trim the downhaul to just barely remove the wrinkles.

Heavy air- Trim tighter to pull the draft forward and open up the leach. Make sure if the wind drops you let off the downhaul as you never want any vertical wrinkles.

**Outhaul-** Outhaul tension depends on wind strength and your own sailing weight. When sailing upwind the outhaul should be adjusted so the sail stays from 3" to 5" (loose for heavier skippers) off the boom. The easiest way to measure your adjustment is to slide your hand between the boom and sail aft of the mid mainsheet blocks. In heavy air you may want to keep it a little tighter than described above.

**Mainsheet-** The boom should trim to the corner of the transom. You will need to constantly adjust the mainsheet as the wind strength decreases (looser) and increases (tighter). It's best to try to hold the mainsheet as much as possible to quickly react to puffs.

**Shrouds-** Keep both shroud levers down.

## DOWNWIND SAIL TRIM

**Mainsheet/Reaching-** Ease out the sheet so the sail is out as far as it can go without luffing.

**Mainsheet/Running-** Ease out the sail to where the boom is at right angles to the boat.

**Downhaul-** Ease off all the way when reaching or running.

**Outhaul-** Leave or ease off slightly when off the wind. For short course racing it is usually best to leave the outhaul alone.

**Boomvang-** Trim in so the top batten is either parallel to the boom or slightly twisting off if sailing dead downwind.

**Daggerboard-** The daggerboard should be pulled up half way on a reach and all the way up on a run. The only time you might not pull it up is if you need to maneuver around some boats or if you might capsize. Add the appropriate hardware to maintain board height so the crew does not have to hold it.

**Shrouds-** Let off the leeward shroud as soon as it's cutting into the main.