



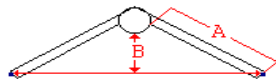
## Lark Tuning Guide

The aim of this tuning guide is to help you get the most out of your Lark. Although the following measurements should enable you to set your boat up close to its ideal settings, it is worth bearing in mind that it is only a guide and minor alterations may be required for different boats and helmsmen.

### Spreader Settings

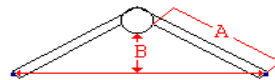
There are two measurements for the spreaders, length & deflection. Spreader length affects the sideways stiffness of the mast and is taken by measuring from the side wall of the mast to the shroud (A). Spreader deflection is taken by putting a straight edge from shroud to shroud and measuring from this edge to the aft face of the mast (B)

#### Parker hull



Length: 398mm  
Deflection: 155mm

#### Rondar hull



Length: 380mm  
Deflection: 150mm

### Rig Tension

Rig tension varies between Parker and Rondar hulls. Parker hulls should be using approximately 300lbs (26 on Super Spars Gauge) while Rondar hulls should be using approximately 280lbs (24 / 25 on Super Spars gauge).

Increasing the rig tension reduces jib luff sag and straightens out the entry to the jib. This makes the jib point higher but less responsive to changes in wind strength and waves and therefore more likely to stall.

### Mast Rake

Mast rake is measured from the top of the mast to the top of the transom. It will vary between boats but should be in the approximately 21'9" or 6630mm for Parker hulls and 21'11" or 6680mm for Rondar hulls. To measure mast rake, hoist the jib with the appropriate rig tension and measure 18' to the top of the black bank at the gooseneck. Cleat the main halyard in this position and then measure the distance to the top of the transom. This is the mast rake. In heavy winds lighter crews should consider dropping the shrouds down one hole.

### Jib Fairleads / Barber haulers

For the sake of these guidelines moving jib fairleads forward can be equated to pulling the barber haulers on / down. The position of the jib fairleads affects the tension in the foot & leech of the jib. Moving the fairleads aft increases the tension in the foot and allows the upper leech of the jib to open

(top windward tell-tale breaks before lower ones). Conversely, moving the fairleads forward decreases tension in the foot and closes the upper leech of the jib (lower telltale breaks first).

**Light winds** - The pulley on the floor should be set so as the jib sheet bisects the clew of the jib at roughly 45degrees. It is very important to ensure the top of the jib is kept quite open in the light airs to allow the air to flow through the slot. The top tell-tale on the inside should just lift before the bottom ones. (this will give you roughly the right jib sheet tension).

**Medium winds** – As the wind increases you should try and keep the jib sheets bisecting the clew of the jib at 45 degrees. The fairlead should be moved forward to stop the top of the leech being blown open and spilling power. Sheet the jib again using the top tell-tale as the guide for correct tension. (Top tell-tale just lifting).

**Windy conditions** – The same approach as with medium winds should be taken in that you may need to move the fairleads further forwards again to get the same sheeting angle and control the leech.

**Very windy** – Move the fairlead back to open the upper leech and prevent the slot getting choked. If you find the mainsail backing a lot then you may need to ease the sheet a bit, again making the slot wider.

If in doubt consider the fairleads / barber haulers as a kicker for the jib. As the main kicker is pulled on the fairleads should be moved forward and when it is eased they should be moved back.

### **Mast Ram:**

0-5 knots: Ram pulled forward to help flatten the main

5-10 knots: Ram in neutral position

10-15 knots: Use ram to straighten mast

15 knots – Racing Abandoned: Let the ram off **1 inch** to bend the mast & depower the sail

### **Kicker**

In light winds you should only put on enough kicker to remove the slack from the system when sailing upwind. Once you start becoming overpowered and have to ease the main you should aim to have the top leech telltale on the main flying approximately 80% of the time i.e. occasionally flicking back behind the main.

In the Lark it is important not to use too much kicker as the mast is very flexible. Consequently it is quite easy to over bend the mast so that the sail becomes too flat in the bottom half. Look for diagonal creases from the spreaders to the clew of the main as a sign of too much bend and therefore kicker. When sailing downwind, aim to have the leech tell tale flying continuously.

### **Outhaul**

When sailing upwind this should just be kept on tight in all conditions with the exception of light and choppy conditions where it can be eased approximately 1 inch to give a bit more power through the chop.

Downwind on broad reaching legs you may ease it out 2-3 inches to give more power to the base of the sail.

### **Cunningham**

This should only be used in very windy weather to de-power the main. It should be the first thing that is let off when the wind drops.

## **Spinnaker**

The spinnaker pole should be set so that as you are reaching along the clews are at the same level. We generally tie the head of the spinnaker so that it flies a couple of inches from the block in the mast. In a very light breeze when it is difficult to get the kite to fill, dropping the pole height will encourage the sail to fly again.