



### Mirror N/A Tuning Guide

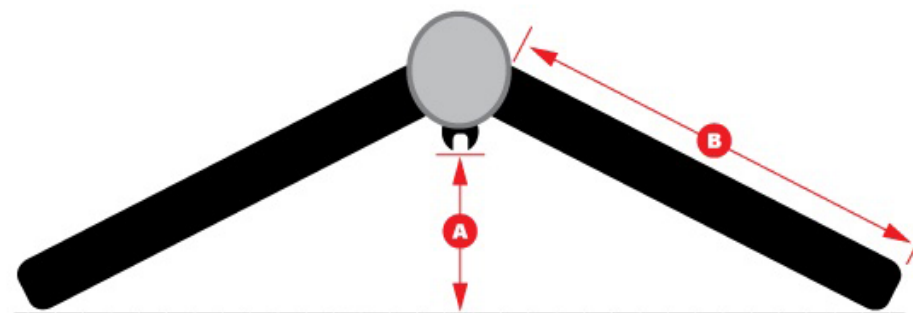
**Class: Mirror**

Mast: N/A

Crew Weight: 16-17 STONE

**A** N/A

**B** N/A



|                         |  |  |  |                                       |                                       |                                       |
|-------------------------|--|--|--|---------------------------------------|---------------------------------------|---------------------------------------|
| Wind                    | 0-4  | 5-9  | 10-14  | 15-19                                 | 20-24                                 | 25+                                   |
| Mast rake               | 5020   | 5020   | 5020   | 5020                                  | 5010                                  | 5010                                  |
| Rig tension shrouds Lbs | 15   | 15   | 15   | 17                                    | 17                                    | 17                                    |
| Kicker                  | Loose  | Loose  | Quite tight top tail stalling                    | Tighter                               | Lots                                  | Lots                                  |
| Reasons                 | Top tell tale should be stalling 30% of the time | Top tell tale should be stalling 30% of the time | Top tell tale should be stalling 30% of the time | To control twist & blade out mainsail | To control twist & blade out mainsail | To control twist & blade out mainsail |
| Outhaul                 | Tight crease along foot                          | Tight no crease                                  | Loose a 15cm gap                                 | Tighten                               | Tighten                               | Tight                                 |
| Downhaul                | None   | None   | None   | Slight                                | On hard with increasing wind          | On hard                               |
| Jib Height              | One finger                                       | Two fingers                                      | Two fingers                                      | Two fingers                           | one finger                            | Low as possible                       |
| Jib tension             | 2' of tight                                      | 1" of tight                                      | Tight  | Tight                                 | Tight                                 | Ease to foot                          |

© 2015 Copyright Pinnell & Bax Ltd.

Inside transom to aft of mast = 2129mm

The boat builder should position the centreboard as far aft as possible under Class Rules.

All measurements for rake are taken from the top of mast to top of transom. Pull a tape to 4m 22 measuring to top of the gooseneck giving datum point; now measure to top of transom to gain a rake measurement. This ensures a constant top of mast point, transferable from boat to boat.

#### Fairleads

Bearing point between fairleads 715mm

Bow to bearing point of fairlead 997mm (taken to outside edge of the middle of the bow)

Tack of jib should be raised or lowered according to wind conditions use the top of the gun haul as a datum point.

Downhaul (Cunningham) 2 to 1 cleat on boom, place a pulley above the gooseneck on mast.

Outhaul 6 to 1 cleat on boom

Kicker 4 to 1 Cascade leads to the centre of the boat.

#### Spinnaker pole height

Bow of boat to bearing point of pole end 1430mm

Pole eye on mast 1070mm up

#### Mast Rake

Gaff rig - There is only one way to measure mast rake accurately and this is with a tape measure from the top of the mast to the transom. To do this in the Mirror you need to tighten the forestay so there is 180lbs of rig tension. Turn the boat on its side and measure the distance from the pin that holds the main halyard sheave in the top of the mast to the top of the transom (on the outside). This gives the mast rake. Try to sail with a mast rake of between 3540mm and 3570mm.

Bermudan rig- Pull a tape measure up the mast until the tape reads **4mm22** to the top of the black band by the gooseneck. This creates a datum point so every boat can be measured the same. Now swing the tape to the back of the boat, on top of the transom along the centre line. The distance to the top of the transom should be 5020mm. With the mast raked to the correct position tension the forestay until there is 160lbs (15 on Super Spars gauge) on the shroud

To increase the rake move the shrouds down a hole in the chain plates (which gives a smaller number because the mast is raked backwards and the mast top is closer to the transom). To decrease rake move the shrouds up a hole in the side chain plates (this gives a bigger number). When over powered rake back half a hole to 5010mm and Tension to (18 on Super Spars gauge)