



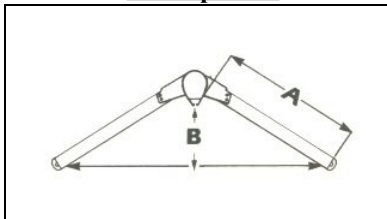
GP14 TUNING GUIDE

The aim of this tuning guide is to help you get the most out of your GP14. 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

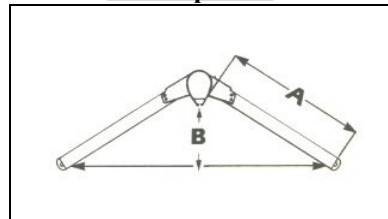
The two spreader measurements are spreader length and spreader deflection. Spreader length controls the sideways pressure on the mast and therefore affects the mast's sideways stiffness. It is measured from the side wall of the mast to the shroud (A). Spreader deflection controls the pre-bend in the mast. It is measured by putting a straight edge from shroud to shroud and then measuring from this edge to the nearest point on the luff groove (B). The deflection measurement is a guide to getting the pre-bend set correctly but may need to be altered slightly (see pre-Bend).

Fat Top Mast



A=360mm
B=155mm

Slim Top Mast



A=380mm
B=150mm

The Mast

The position to step the mast is obtained by measuring the distance (in a straight line) from the back of the transom, through the transom flap, to the furthest aft bolt in the mast step. This should be **2845mm** in Mark 2 GP14's. In the Mark 1 boats, the mast should be stepped as far back as possible in the mast step.

Now hold the mast about $\frac{1}{3}$ to $\frac{1}{2}$ out of the gate and attach the shrouds. To check the pre-bend, hold the main halyard tight against the gooseneck. The distance between the mast and the halyard at spreader level is the pre-bend. You should have a pre-bend of about $\frac{3}{4}$ inch. Pre-bend can be altered by angling the spreader tips forward or aft very slightly to get the desired reading.

When you put up the genoa with 400lbs of rig tension and check the pre-bend again, there should be almost no gap between the halyard and the mast i.e. straight mast.

Rig Tension

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. The rig tension must be easy to adjust and the best place to locate this control is on the centreboard capping. We generally sail with **400lbs** of tension. Below 10 knots the rig tension should be reduced to **350lbs** and further reduced to **300lbs** if it is a drifter. If it is very breezy (above 20knots), you can increase the tension slightly to approximately **440lbs** (Be careful with older boats as this puts a lot of strain on the boat).

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 range 21'9" – 21'11" (I sail with a rake of 21'9½"). To do this, hoist the jib with 400lbs tension and measure 18' to the top of the black band 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.

Genoa

To ensure there is as small a gap as possible between the bottom of the deck and the Genoa, the tack of the Genoa should be as low as possible i.e. connected directly to the bow plate fitting.

If the rig tension, mast rake and pre-bend are all set correctly the clew of the Genoa will be approximately 3 inches from the fairlead. This is true for most makes of boats although occasionally there are exceptions.

Genoa Fairleads

These should be set so that if you follow the angle of the genoa sheet through the clew, it almost bisects the angle formed by the clew and foot but sheets slightly more down the leech. In medium and heavy winds, the jib should be pulled in as tightly as possible. As the crew starts to move inboard he should ease the jib in ½ inch increments so that when he is sitting in the middle, the genoa is eased approximately 1 inch. When the crew is sitting to leeward in very little wind the genoa should be eased to a maximum of 2 inches from bar tight.

In winds above 15 knots the fairlead can be moved back one hole on the track to open the upper leech of the jib and prevent the slot getting choked.

In very windy conditions (20+ knots) the fairleads can be moved back 2 holes. If you do not have through-deck sheeting, the fairlead tracks should be positioned in the middle of the deck.

Mainsail

The mainsail should only ever be hoisted to the bottom of the black band even though some 'speed bump' creases may be evident along the luff when sailing. In light winds the main should be lowered slightly so that it is approximately ½ inch below the black band. If the mainsail has been hoisted too much, a crease will be evident running parallel to the mast. This is most easily noticed when sailing downwind.

Kicking Strap

This is the most critical control when racing. In very light winds you should just have the slack taken out of the kicker when sailing upwind. As the wind starts to increase, aim to have the top leech telltale on the main flying approximately 80% of the time i.e. occasionally flicking behind the mainsail. Downwind this telltale should be flying continuously.

Above 15 knots the telltale will fly no matter how much kicker is put on. The kicking strap then becomes a power control – if the boat feels underpowered let some off, if you are overpowered pull more on.

Cunningham

The cunningham should only be used in a GP14 in 15 knots and above. In these conditions some cunningham may be used to remove excessive creases in the main luff. Do not remove the creases completely however and do not use the cunningham when sailing downwind.

Outhaul

The outhaul should be pulled tight to the black band in all conditions when sailing upwind. The only exception to this is when sailing upwind in very choppy conditions in approximately 10-12 knots when it can be eased up to **1 inch** to help power up the mainsail.

On the reaches the outhaul should be eased **1½ -2 inches** except on a close spinnaker reach when it is left on tight. On a planing 2 sail reach it can be eased **2½ inches**.

When running the outhaul should only be eased **½ inch** to keep maximum sail area to the wind.

Spinnaker

A stopper knot should be put into the spinnaker halyard so that when fully hoisted, the head of the spinnaker is about 3 inches from the mast.

90% of the time the spinnaker pole should be set so that both the tack and clew are level. A guide to checking this is to look at where the spinnaker breaks when eased (top, middle or bottom). If it starts to curl near the top then the pole is too high and vice versa.

If the wind drops almost completely so that you are struggling to get the spinnaker to fly, dropping the pole a few inches can support the spinnaker and help it to set.

Due to the relatively small size of the GP14 spinnaker there is no advantage to be had from sheeting to the transom. We put the fairleads at the widest point in the boat

We hope that this guide is of use to you. If you have any further queries or problems please do not hesitate to contact [Speed Sails](#) at +44 (0)1922 455503.

Richard Estaugh