

# Tuning your asymmetric

Rob Wilson takes time out from the Belgian Formula 18 Nationals to look at asymmetric spinnaker tuning. Fine tuning of your asymmetric ensure that you get the most out of downwind legs on the course. With a well-designed spinnaker tuned well, there is no reason why you can't be one of the fastest boats on the water.

The critical points to getting the best out of your **asymmetric** are the **sheeting position, luff length, luff line** and **leech line**.

## Luff length

This is the distance measured between the block at the top of the mast and the end of the pole. To measure this, run a tape measure up the mast on the spinnaker halyard and push the pole up to take out any slack in the system. Once a fast

setting is found this can be recorded so that it can be reproduced in the future. In the Formula 18 we set the luff length to an all-round position for 9 knots plus, then all we have to do in very light winds is the ease the halyard approximately 4 inches to

soften the luff. In very strong winds the all-round position still works well because the apparent wind moves aft slightly, so the luff does not have to go any tighter. This allows the spinnaker to project forward, keeping the bows out of the water.

## Luff too tight

The symptoms of the luff being too tight are a very tight straight line down the front edge of the spinnaker, as in the photo. The spinnaker will become hard to trim and it will feel as though you have to pull the sheet very hard to keep it flying. Try easing the halyard about three to four inches.

## Luff too eased

If the pole height is too high, or the spinnaker halyard is too eased then the luff will sag off to leeward. In this case the spinnaker will be quite easy to trim but you will lose speed as the spinnaker is pulling more sideways rather than forward. To solve, make sure the halyard is tight. If the halyard is already tight you will have to go to the shore and lower the pole.

## Luff just right

With the luff tension trimmed correctly, the spinnaker should be easy to trim, projecting nicely and not sagging off to leeward.

Photos: Rob Wilson



## Sheeting position

Many catamarans have the sheeting position fixed, so you are relying on the sail maker to design the spinnaker well to get the right sheeting angle. If you do have the ability to adjust the fore and aft sheeting angle then the principles are much the same as tuning a jib. The more forward the sheeting position, the more you will sheet down the leech, so the sail will set up deeper and less twisted. If you move the sheeting position back the spinnaker becomes flatter, especially in the base, and more open in the head.

If the boat feels like you are flying a hull early but do not have much forward boat speed, then often it is a sign of sheeting too far forward. On the flip side, if the sheet is too far back you will be slow to fly a hull relative to others but have good speed (assuming you are the same weight!). This will lead to sailing high and not the best VMG. In the photo, the sheeting position is a little too far forward and it is possible to see that the base is quite deep relative to the rest of the sail.



## Trimming

**Keep the kite just on the edge of curling; if it is curling constantly it is too eased, but make sure that you do not over-sheet the kite as this will kill speed.**

## Rigging your asymmetric

In addition to the above there are a few other little tweaks that will help you to get the most from your asymmetric. Try and set the pole height so that when the luff is at its optimum for medium to windy conditions the spinnaker is relatively tight to the block at the top of the mast and tight at the tack. Do not worry about the halyard or tack line being too close to the blocks because when sailing the ropes will stretch slightly and the spinnaker will be free to rotate.



Tie the tack with a half hitch and thumb knot to ensure the spinnaker does not sag off to leeward. It is very important to get the spinnaker tight to the end of the pole. The head can be tied with a small bowline; a small gap can help to get the spinnaker an inch or so away from the mast.

To make sure that the spinnaker doesn't get caught on the forestay during gybes it is important to find an efficient way of attaching the spinnaker sheet to the clew. I like to use rope with a core, pull a couple of inches out with a fid and then whip on either side. This can then be threaded through itself to fix onto the clew of the spinnaker.



Hopefully these tips will help you to get the most out of your spinnaker, now it's just up to you to steer smoothly, trim well and sail fast! ▶

## Luff line

Many spinnakers come with a luff line that can be adjusted. A common tuning fault with asymmetric spinnakers is that the luff line can shrink and hence make the luff of the spinnaker very rounded or knuckled. The problem looks similar to having the luff too tight, but will not go away when the halyard is eased. To solve the problem, untie the luff line and ease one or two inches at a time, until the luff does not round up. If the luff is eased too much, the tape at the front will have very little tension and look rippled.

## Leech line

As with the luff line, the leech line can also be fine tuned; if it is too tight the exit of the spinnaker will look hocked in the back two inches. If it is too loose it will have a rippled look and may vibrate slightly downwind. In the photo, the leech line is just on the edge of being too loose. It is better to have the leech line too loose than too tight.