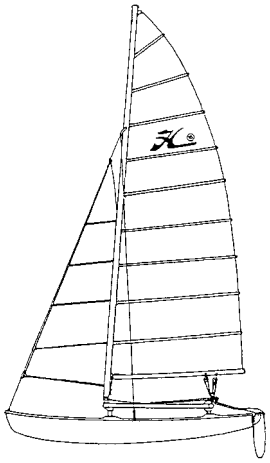
Sailing Guide Hobie Cat 16



By Hobie Cat 16 World Champion Gavin Colby

INTRODUCTION

Hobie Cat 16 is, above all, a story of pleasure, of FUN, of fantasy, and of FEELING. Even if we would prefer whenever possible to sail at the front, we never forget the pleasure of sailing, whatever our placing in the race.

Here is how we set up our boat... it is not a Bible. You will certainly find your own personal set up adapted to your morphology and to your way of sailing.

Here are our little secrets. We hope we can talk to you about them when our paths cross on the water.

On the Beach

Making a Hobie 16 go fast starts well before you put the boat on the water. Preparing the boat to make it as fast as possible will make sailing the boat around the course a lot easier and you will tend to make less mistakes.

The faster the boat goes the more confidence you will have and sail better, you will!

Hull Condition

Keep the hulls clean and scratch free. Any blemishes on the hulls slow the boat down dramatically, a lot more so than any sort of crease in the sails. I would recommend a good polish a few times a year just to help the boat a little more sliprier. Also never, ever sail or drag the boat up the beach. This just scratches, and leaves deep grooves in the bottom of the boat. Buy, borrow or steal a set of beach wheels and try to keep the bottoms in good condition. When it comes time to sell the boat your pocket will be a lot happier as well.

Rudders

Like with the hulls, rudders have to be clean and scratch free. So pull the rudders up before you hit the beach. The rudders are reasonably tough but can be chipped or even broken. Chips in the rudders are not fast. Giving the rudders a good sand with a 1200 'wet and dry' paper and a polish once or twice a year will keep the foils smooth and blemish free.

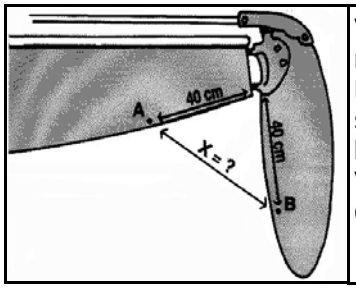
Trampoline

As a Hobie 16 is not the stiffest boat in the World any stiffness that can be gained is a bonus. The stiffer the boat is the faster it will go. By getting the trampoline as tight as possible it will help the rigidity of the platform, making the boat stiffer and therefore faster. Be careful as not to pull out the eyelets when doing this though. Everyone uses different methods to get the tramp tight, but I still think using the pair of old gloves and your hands is the best way. Remember bending the side bars reduces leverage when trapezing.

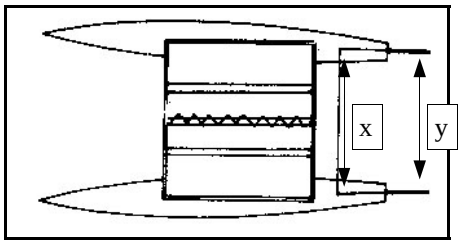
Mast Set Up

I always try to be around 135 kg of crew weight. At this weight when raising the mast we place the side stays in the hole as shown in the table below. From here the minimum mast rake setting is set and only more mast rake can be added by sailing a with a loser jib halyard. It is very important to be in the right hole on the side stays or else the boat will be well over powered or underpowered depending on your crew weight.

<125kg Bottom hole of stay adjuster
125-134kg 2nd Bottom hole of stay adjuster
135- 144kg 3rd Bottom hole of stay adjuster
>145kg 4th Bottom hole of stay adjuster



Verify the compensation of your rudders.
Place A point at 40 cm from stern and B point at 40 cm from bottom part of rudder head.
Verify that x has the same length on both rudders.



Measure x on the tiller connection and y at the end of the rudder blades
y must be 5 mm longer than x

Batten Tension

Not something I really worry about. Certainly taking out the wrinkles seems important but I have on more than one occasion forgotten to tension one or a number of battens and it made no noticeable difference to the performance. Most of the performance difference comes from looking up at the sail and thinking, "that looks terrible, it can't be fast!"

So just simply pull the wrinkles out and add a little more tension to help the batten pop. You might need to add more tension in the top battens, which are shorter and more difficult to bend over their length.

Jib Position

Getting the Jib as low as possible but still achieving leach and foot tension makes the rig more efficient. I tend to get the jib even lower by travelling out the jib cars up wind. By doing this, as the front cross-bar is bent the jib can be lowered on the front stay adjuster, drawing it away from the mast further. I pin the jib tack on the 2nd hole of the forestay adjuster but due to subtle difference in each boat and sailor for the matter it may be a little different for you. So just remember to keep the jib as low as possible. When you pull the jib up and sheet on, if there is a gap between the jib blocks and the front cross-bar at maximum tension, lower the jib on the forestay adjuster.

The sheet position on the Jib clew board for me never really changes and always seems to be on the second or third hole from the bottom.

Jib Halyard Tension

When rigging the boat we firstly pull the Jib Halyard on till the rig is firm. I have always sailed with a generally tight rig so after we have gone for a little bit of a sail we pull the rig tension on some more to allow for stretch in the

rope, knots and wires. It is very important to mark the jib halyard at the setting what seems fast. To get this setting will mean time on the water as there is no standard position. To find the setting simply try to sail against other people and see where it is the fastest. To adjust on the water stop the boat and change the halyard position by only 2.5cm at a time. This control makes such a big difference adjustments over 2.5cm will mean you can go from one extreme to another. Adjust tighter or looser by the following:

If you are overpowered, cant pull the mainsheet 'block to block', having difficulties holding the boat flat upwind, or seem very high and slow: LET OFF THE JIB HALYARD

If you are underpowered, very easy to pull the mainsheet 'block to block', dragging in the water or difficult to trapeze, or seem to have no height: PULL ON THE JIB HALYARD

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Remember only adjust at 2.5cm at a time

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Trapeze Height

This varies greatly on what kind of Trap Harness you have and how loose you wear it. But the idea is to be as low as possible. In the last race of the World Championship I think it must have been the highest I have ever trapezed in my life! As a general rule my crew's trapeze hook at the bottom most point is around 10cm below the side bar. The skipper is a little higher, around the same level as the top of the side bar, so they can see over the top of the crew.

Mainsail Luff Tension

Again not something I really adjust. I never adjust it during a race and the only time I ever pull the Cunningham on is if the wind is very, very strong. So where do I have it? With wind from 5- 20 knots the bottom of the gooseneck is 6cm above the black band sticker on the mast. It works for me here every time. Over 20 knots we use more tension, perhaps to halve that distance.

Rudder Alignment

As I am a little lazy and disorganised when it comes to regatta's tape measures are not something I normally carry around. I find simply sighting down the hull, with the rudders down from the back of the boat adequate. Just line up the rudders with the bow of the boat. Remember I am generally sailing around with one rudder up so having them not perfectly aligned doesn't make any difference.

If you are a bit of a technical freak use this method. Measure half way down both rudder blades on both the leading and trailing edges make a mark with a pencil at this point. Starting on the trailing edge get the crew to hold the 'dumb' end of the tape measure on the opposite blade. Measure the distance between the two trailing edges. Then do the same thing for the leading edge of the blades. From memory the difference should be about 5mm narrower on the front edge.

Once Rigged

Remember the less stuff you carry around the better. So cut any excess lines and over length sheets that you don't need.

On the Water

Always try to get a good length windward/ leeward leg in before the stat of the race. 5 minutes on both tacks is very important to test speed and make sure all is ok.

I run through a small check- list to make sure the boat is ok:

Rig Tension	Firm as possible
Trapeze Height	Low as possible depending on waves
Cunningham	Pulled to the correct mark

Up Wind:

<u>Double Trapeze Conditions</u>

Remember the Jib Halyard tuning talked about earlier. You must adjust the jib halyard to suit for the conditions but I generally sail with the sail setting all the time. Ideally the main traveller should move between the center (for the lightest lull in the wind) and slightly past the foot-strap (for the strongest gust). Try to always keep the mainsheet 'block to block' when sailing up wind. This is the 'double trapezing upwind range' for the Hobie 16. You want to set the boat up to do this.

The Jib Cars should be out at least half way to the front corner casting and the jib should be sheeted very tightly. Be careful to ease the jib sheet when the breeze drops as the jib is very big and can easily touch the mast and close the slot.

Crew position on the boat. I generally stand quite a long way back on the side bar. My back foot in flat water is around 15cm from the back of the side bar with my crew as close as possible. As the wind increases we move back to the corner casting, and sometimes in big waves I put on foot on the hull and my front foot on the side bar.

<u>No Trapeze Conditions</u>

For light wind when you cannot double trapeze it is simply a matter of steering and trimming well. Very different set-ups work in light wind, but the team that can trapeze first has the most power and generally speed. In the lighter wind getting the mainsheet 'block to block' is not possible so I ease the main traveller out 15cm from the middle and concentrate on trimming and steering well and pay lots of attention as to not over-sheet.

center than in stronger wind and the jib sheeted loosely. By doing this the slot is left open and we promote a little twist into the sail.

Crew position on the boat. Firstly, only ever sit on opposite sides of the boat when there is no wind. As soon as the boat can lean over just slightly the crew and skipper should sit together on the boat. It is important that the crew stays as low as possible so they can see under the sails and you both stay very still and all movements are very smooth. Jumping around on the boat will only make it go slower. Sit up the front of the boat, in front of the side stays, close together.

Down Wind

Do not let out the Cunningham down wind. It makes no difference. Move your weight aft as the breeze increases to prevent the boat from nose diving. The crew should try to stay as low as possible to be able to see under the sails. Always sail a broad reach using apparent wind and gybe through 90' down wind. Let both the Main and Jib Travellers out completely down wind and trim the sails to suit.

After that it is a matter of getting a good start and pointing the boat in the right direction!