Hobie 18 - Rigging and Tuning Guide

by Bob Mimlitch

This guide will help get you and your 18 in the ballpark, but remember it is only a guide, there are many ways to sail a Hobie fast.

Rigging and Setup

Rig Tension	Not too tight, eased enough so mast rotates freely (≈ 4" to 5" movement in shroud).
Mast Rake	Don't rake it back, start at the third hole from bottom of shrouds and tighten forestay.
Diamond Wires	Light air - tight for more draft and power. Heavy air - loose for more mast bend, flat sail and higher speed.
Rudders	Parallel, no toe in or out. Shape the trailing edge into a thin but flat edge (≈1/16”).
Tramp	Tight, tight, tight.
Jib Luff Tension	Tighten mainsheet to its upwind setting then set the jib luff as indicated below.
Batten tension	Just snug, except for the top three which should be tight in light to moderate air. Always release the batten tension before storing your Dacron sail.

Sailing Upwind

Light Air

Main	Mast Rotation	Point at leeward shroud.
	Downhaul	Just smooth (set with main sheeted lightly).
	Outhaul	Bottom batten 1" to 2" draft.
	Traveler	Centered.
	Mainsheet	Light, do not over sheet as sail will become too flat and hook to windward.
Jib	Luff Tension	Just smooth (set on beach with main sheeted for conditions, see above).
	Traveler	Four holes visible to the rear of the traveler.
	Jib Sheet	Do not over sheet the jib as it will cut off the air flow to the main.
Tiller		Foot (sail a little further off the wind) in light air. Steer so that leeward. tell tales are flowing but on verge of stalling if you foot much more.
Balance		Bows depressed, crew to leeward, crew and skipper on crossbar or bow.

Moderate Air

Main	Mast rotation	Point at leeward shroud.
	Downhaul	Tight (set with main sheeted normally).
	Outhaul	Bottom batten 0" to 1" draft.
	Traveler	Centered.
	Mainsheet	Tight.
Jib	Luff Tension	Just tight (set on beach with main sheeted for conditions, see above).
	Traveler	Near the rear of the traveler to open the slot.
	Jib Sheet	Tighter in smooth water - Ease in choppy water.
Tiller		Steer so that leeward tell tale below H is flowing but on verge of stalling.
Balance		Crew and skipper on windward hull and forward, boat level.

Heavy Air

Main	Mast rotation	Point at the leeward shroud.
	Downhaul	Very tight, continue to tighten to keep hull from flying too high.
	Outhaul	Tight.
	Traveler	Centered, move 6" to 12" out if the hull continues to fly too high. When you travel out, ease the jib to keep the slot open.
	Mainsheet	Very tight, keep the sail flat. Travel out rather than sheeting out in a race.
Jib	Luff Tension	Tight (set on beach with main sheeted for conditions, see above).
	Traveler	Rear, to induce jib twist-off.
	Jib Sheet	Tight.
Tiller		Sail closer to the wind and steer high in the gusts rather than sheeting out.
Balance		Boat level, crew and skipper trapezed as required to keep hull skimming.

Sailing Downwind

Light to Moderate Air

Main	Mast rotation	Rotated 90° to 100°
	Downhaul	Ease
	Outhaul	Bottom batten 5" to 10" draft.
	Traveler	Even with inside edge of hull in light air, 6" inside hull for moderate air.
	Mainsheet	Light tension, ≈ 30" from boom to crossbar.
		The sail should be touching the shrouds, but not deformed by them.
		Sheet in during gusts to pick up speed and ease the sail when they pass.
Jib	Jib Sheet	Hand hold clew just outboard of and even with forward crossbar.
		Raise and lower the clew to keep the upper and lower tell tales balanced.
		The Skipper will direct the fore and aft movement of the jib to match main.
		The sails are matched when both jib and lower main tell tails act the same.
Tiller		Steer to keep lower main and jib tell tales flowing back.
		Both sets of upper main tell tales will flip back and forth.
		Bridle tape will flow across and slightly to the rear.
Dagger Boards		Half way up.
Rudders		I leave them down, but some like the windward rudder up.
Balance		Bows depressed, crew to leeward, crew and skipper on crossbar or hull.

Moderate to Heavy Air

Main	Mast rotation	Rotated 70° to 80°
	Downhaul	Ease
	Outhaul	Bottom batten 4" to 6" draft.
	Traveler	6" inboard of the hull.
		In heavy conditions center the traveler before you jibe.
	Mainsheet	Medium tension, sheet in during gusts to pick up speed.
Jib	Traveler	Forward to provide full jib.
	Jib Sheet	Trim to match main, tell tales on jib and main should break together.
Tiller		Steer so leeward tell tale below H occasionally stalls, In gusts sail deeper.
		Both sets of upper main tell tales will flip back and forth.
		In heavy gusts, when you feel out of control, steer more downwind.
		If conditions are too heavy to jibe, come up, tack and fall off (270° turn).
Dagger Boards		Half way up
Rudders		I leave them down, but some like the windward rudder up
Balance		Crew and skipper on windward hull, move back as wind & waves increase.

Hobie 18 Tips

The most critical tell tails are those on the leeward side of the sail, usually the opposite side from the skipper. Keep them flowing!

The best tell tail locations are 9" to 12" aft of the luff of the jib and 12" aft of the boltrope on the main. Three sets of tell tails per sail are enough, one set in the lower half, one mid sail and one set in the upper half.

A windvane, such as the TeloCat, with arms set 30° either side of center is excellent for determining the optimum upwind angle. If the tail of the vane is inside the arm, you're pinching, and the tail outside the arm indicates footing. The vane a great aid for quickly getting on a good upwind course after a tack.

To depower in high wind: (1) downhaul and outhaul to the max, (2) travel out the main, (3) furl the jib, (4) don't sheet way out to reduce power, this causes a lot of twist-off which makes the boat hard to control. In very high wind consider centering the traveler before jibing or do a 270° turn in the opposite direction.