

TACKING AND GYBING

CHALLENGER SAILING TECHNIQUES

Medium Winds

TACK - To turn into the tack, push the tiller smoothly but firmly to 45 degrees and pull the sail in. As the battens pop across, ease the sail slightly, so that the boom end is over the corner of the transom. Straighten the tiller and wait for the boat to pick up speed then concentrate on pointing the boat as close to the wind as possible whilst making the telltales on the sail fly horizontally.

GYBE - If you are sailing a reach, the turn can be sharper. If you are sailing a run, the sail can be pulled or left to blow across but make sure the mainsheet is not slack as it will catch in the rudder T-bar and is difficult to free.

Stronger Winds

[11-33 knots/force 4/7]

TACK - To turn into the tack, push the tiller smoothly but firmly to 45 degrees and pull the sail in. As the boat goes beyond head-to-wind, ease the boom out 3-4 feet, or even more in strong winds. Straighten the tiller as the sail fills but, if the boat does not accelerate, ease the sail out and bear away a little more, otherwise you will go head-to-wind and stop. As the boat accelerates, gradually sheet in but do not pull the boom closer than about an arm's length from the cockpit. Be very careful not to point too high and stall. Speed is more important than sailing close to the wind in this weather.

GYBE - **Reaching:** Ease the sail and bear away to a run then sheet the sail almost right in, turn a little more and, as the sail blows across, let the boom run out quickly to 90 degrees or until the telltales are all flying horizontally.

Running: Pull the sail in as far as possible and turn. As the boom blows across, steer an S-shaped course to counteract the force of the gybe. Let the boom run out to 90 degrees being careful not to let the sail fill early, as the force will lever the stern out of the water, reducing steering control and slowing the boat.

Medium Winds [4-10 knots/force 2/3]

Light Winds - Don't pull the sail in too tight because the boat stalls easily at slow speeds. Keep the tiller central and as still as possible to stop the rudder acting as a brake. Keep weight forward to lift the stem out of the water and keep the boat heeled so that one sponson is always out of the water, to reduce friction. Keep still in the boat to avoid disturbing the wind and water flows.

Medium Winds - Pull the boom in over the transom corner but be careful not to oversheet and stall, when there will be a dramatic speed reduction and you may end up head-to-wind. (to recover from this, see Safety Checks-When you are Sailing) Use short tiller movements to luff up slightly over the waves and bear away down the front of them.

Stronger Winds - If the boat is struggling, ease the boom out a little. Look upwind for gusts approaching and be ready to spill wind or luff up slightly to keep the speed up. Lean your body to windward to stop the leeward sponson from burying and be careful not to point the boat too high and get "into irons"- stopped head to wind - as it is very difficult to get going again if the boat stops.

Reaching

Light Winds - Keep easing the sail out until all the telltales are streaming horizontally. Keep the tiller as central and still as possible. Keep one sponson out of the water at all times, preferably by leaning to leeward, as this will allow gravity to swing the boom out.

Trim, Balance and Course

- The Challenger is designed so that the crew do not need to move about the boat but, on a beat, it can pay to lean over the leeward (downwind) side in light weather, to lift the windward sponson out of the water and reduce drag. Sailing off the wind, you should lean out over the windward side, so that the leeward sponson is lifted and the sail is heeled to windward, which both cuts down hull drag and moves the sail's centre of effort over the boat's centre line. If the power of the sail is all on one side of the boat's centreline, it will try to push the boat around in a circle. When it is over the boat's centre, the boat will track straight with no correction needed by the rudder.
- If the bows dig in when it is gusty, sliding seats can be moved back a notch to trim the bows up. Otherwise the boat should always be trimmed as level as possible for maximum speed
- On a beat in stronger wind, continuous spray coming off the outer end of the front crossbeam shows that full speed has been reached. Each tack will lose ground to boats that tack less often so only tack when necessary.