

Custom Step-by-Step Victoria R/C Sailing Yachts by OMSA  
revision February 14, 2007, Chapter E

Okanagan Model Sailboat Association, Kelowna, B.C. Canada



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**Step E1:** Hanging the mainsail



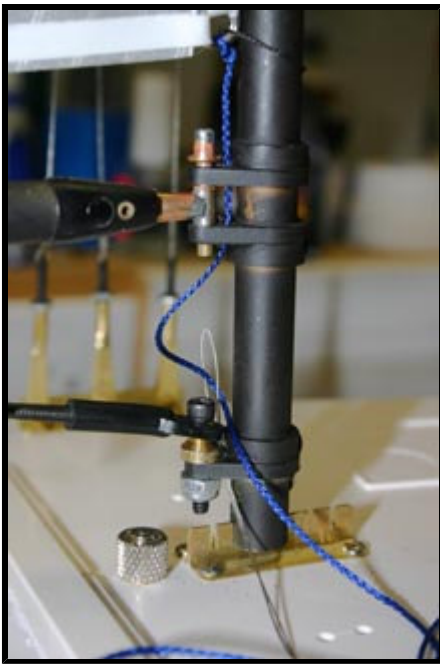
Start hanging the mainsail by suspending the head of the sail from a short line attached to the mast-head crane at a 1/16" hole drilled about 1/4" aft of the mast. Adjust the length of this line (sometimes called an "up-haul" or a "halyard") so that the mainsail is suspended just above the main boom.

Note: all rigging knots must be locked with just a hint of c/a glue if you don't want the knot to come undone in the middle of an exciting race...

This is one of our older Victorias and still carries a very effective suit of mylar sails from Gordon Stout of Calgary, Alberta.

The down-haul line is connected to the foot of the sail in this photo which is run through the 1/16" holes in the goose-neck mount and the boom-vang mount and extends to the port-side deck cleat.

Note the use of a short piece of

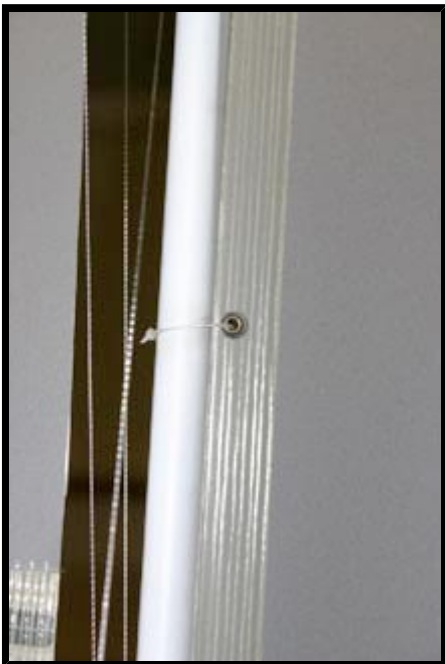


the rigging wire to thread the down-haul line through the 3 mast fittings. This same technique is used throughout the rigging of the Victoria.

This line and the up-haul line as shown in the upper photo, tension and position the mainsail at an appropriate height above the main-sail boom.



This short blue line looping under the boom allows the sail shape to be changed but keeps the sail at a fixed height above the boom.



These mylar sails are hung on the mast with either short pieces of the kit-supplied line or with 20 lb. braided fishing line. The metal loops that come with the kit for this purpose are not very popular with our local builders. Leave a 3/32" gap between the sail and the mast and make all of the loops the same length..



The out-haul line at the aft end of the main boom is used to control the shape of the sail. This line uses the kit adjuster called a "bowsie" and is terminated at the cotter pin at the the 7" point on the boom. See your kit instructions for more details on the bowsie adjusters.

This small spacer is the key to the easy way to get the loops around the mast all the same size. It is made in a few minutes from a scrap piece of wood with

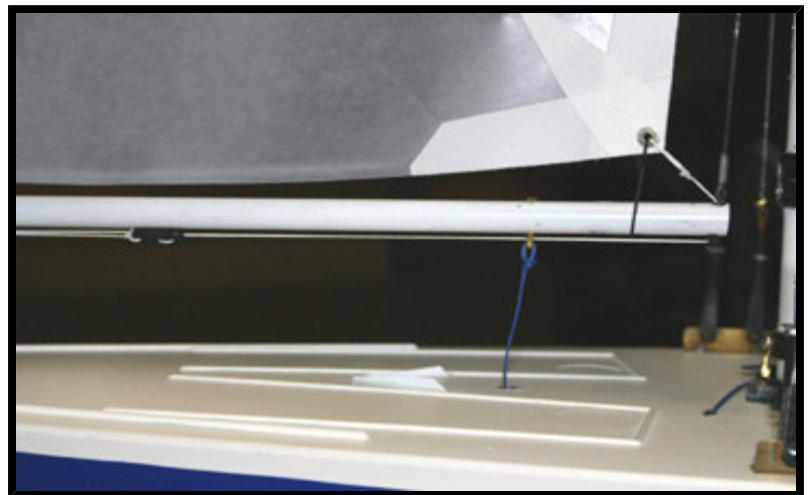


a saw-cut leaving just 3/32" of material at the base. Make a loop with the line, tie in a reef knot, lock the knot with just a hint of C/A glue and move the jig to the next eyelet on the sail.

### Step E2: Hanging the jib

It is easier to attach the jib boom to the foresail on your workbench before the sail is attached to the mast and the ball-bearing deck swivel. (see your local fishing shop for this quality stainless swivel)

Note the small loop of line around the jib boom as well as the adjustable out-haul line with a bowsie. The jib sheet is connected to its own cotter pin and extends down through the deck to the starboard side of the sail servo arm.



Since the blue channels accelerated air flow back to the main sail, most of our sailors agree that the height of the jib above the deck should match that of the main sail, in order to maximize the combined power of the two sails.

On both of the two makes of sails shown here, (and on the stock Victoria sails as well) , a length of "Tiger Tail" wire is inserted into the pocket in the entire leading edge (the luff) of the jib where it supports the jib. This line also acts as the fore-stay to support the mast and is adjusted with a bowsie loop above the fore-sail. (shown here as the light coloured line).

The jib luff is then tensioned with a second line connected to the head of the jib and is shown here in the red bowsie

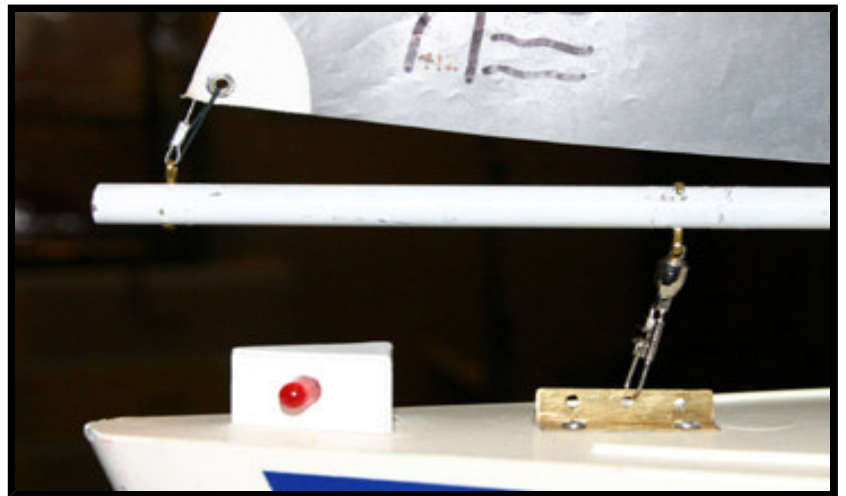


loop.

Here is the jib boom swiveling on the high quality ball-bearing swivel at the jib chain plate.

Note the "Tiger Tail" fore-stay terminated at the front cotter pin and the short length of line holding the jib securely at an appropriate height above the jib boom and also tied to the front cotter pin. The jib swivel is connected to the jib boom by it's own cotter pin.

Brass 1/16" cotter pins work very well for making the connections to the booms if you have the time to shop around and are also available in the hardware kits from **Longbow Yachts**.



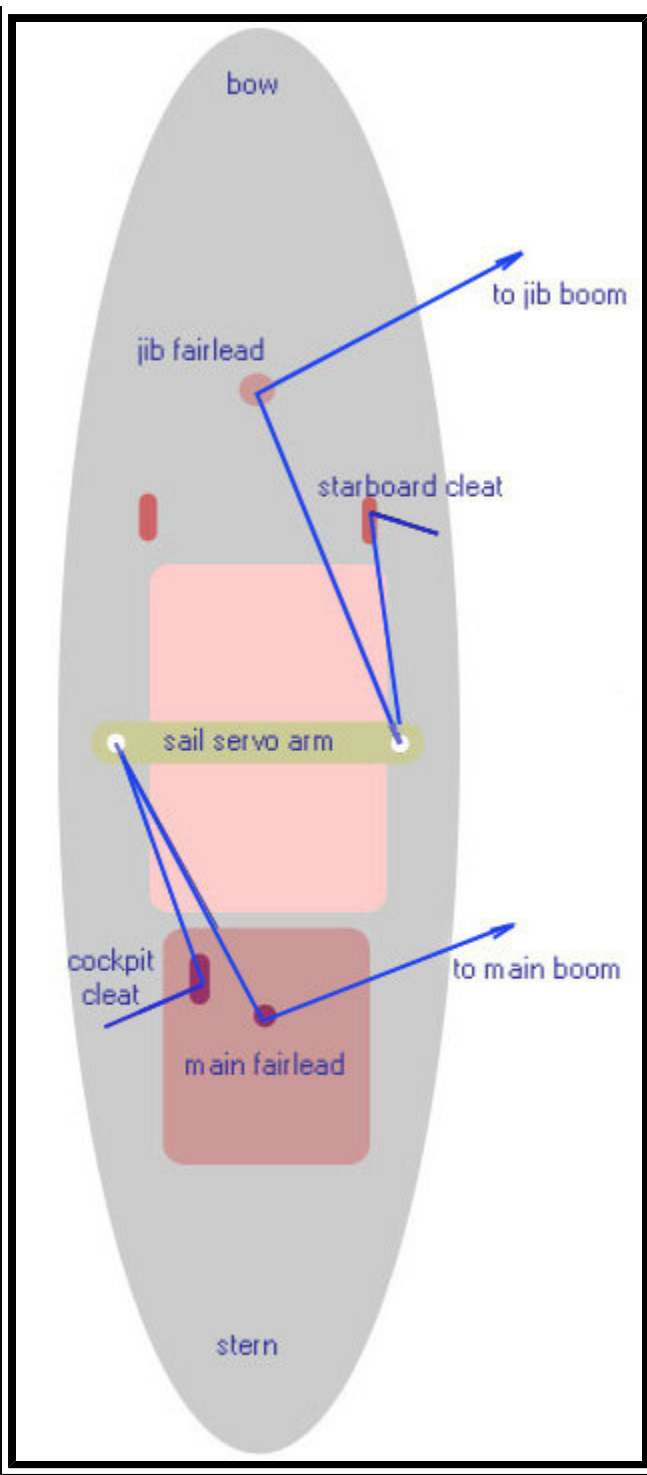
The LED running lights shown here are a bit frivolous but make for a pleasant evening's sail after the sun goes down.

### Step E3: Running your control lines

Hopefully, you will find that this control line or sheet layout is easier to follow than the design described in the Victoria Kit Instruction Manual.

This common and simple design is only made feasible





by the use of the double-ended sail servo-arm with either a pulley, a bead or an eye at each end of the arm through which the line can slide freely.

Many of our builders use the stock control line that comes with the kit and then later try other lines that might have lower friction characteristics.

The lines are run under the deck and come to the top of the deck through a 1/16" hole drilled next to the cleat for that line. The line is then run under the cleat and adjusted so that the the sails are pulled in the right amount when the sail servo arm is in the close-hauled position for sailing upwind. The Victoria instruction manual covers this fairly satisfactorily and some of the great R/C sailors have covered sail adjustments much more thoroughly.

In general, however, in the close-hauled position of the sails, the aft end of the main-boom is approximately positioned above the edge of the gunwale while the end of the jib boom is pointing at the shroud lines. When the sails sheets are fully let out, the sails then should be approximately 90 degrees to the long axis of the sailboat.

You will also want to check out an easy modification to this lay-out covered in Chapter I. Look for the "Quick- adjusting Sail Sheet" option.

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