SL16 Rigging Guide

Contents

Terminology

Cunningham – the mainsail downhaul system attached to the mainsail tack and used to tension the mainsail luff.

Foot, tack, luff, head, leech, clew – respectively the bottom edge, front lower corner, front edge, top corner, rear edge and rear lower corner of a triangular sail (mainsail, jib or spinnaker).

Gooseneck – the fitting attached to the mast to which the boom connects.

Spanner – the arm attached to the mast that forms part of the mast rotation control.

1. Introduction

This document is a pictorial guide to rigging an SL16 Catamaran. There is a separate SL16 Sailing Guide which all CBS members are strongly encouraged to read.

There are a few options (different settings) when rigging the boat; in such cases this guide provides a baseline setting. When you are ready to deviate from the baseline setting you will no longer need this guide! Further information on boat settings for different conditions is provided in the SL16 Sailing Guide.

You should find the boat as follows, please leave it like this when you have finished:

- Tied down at front and rear beams
- Spinnaker chute cover on
- Spinnaker rigged
- Trampoline cover on
- Launching wheels pulled forwards
- Stern supports in place

Check the condition of all parts of the boat and report any damage or wear to the Club Boat Officer so we can get it sorted - don't leave it to someone else to report.

To minimise sail flogging and the chance of accidents if it is windy, **please do not hoist the sails (particularly the jib) until you are ready to launch**, and take the sails down as soon as possible after your return.

If you need to rig the spinnaker and it is windy do it before you leave the shelter of the compound - see section 8.

2. Preparation

Remove the covers and tie downs, lift the bows and push the wheels back to the balance point. *TIP – this is much easier with 2 people*.

Check that the hulls do not contain an excessive amount of water by lifting the bows with the drain bungs removed from the transoms.

You can rig the boat in the compound if you wish, however it is usually easier to rig it on the seafront by the slipway (especially if the Club is busy or the wind direction will make it difficult to get the boat out of the compound with the sails up). *TIP - load all the gear onto the trampoline before moving the boat out of the compound rather than carrying items individually*.

Position the boat head-to-wind, on the stern supports with the wheels pulled forwards so that the boat is stable and you can reach the forestay to rig the jib. Check that:

- The drain bungs and inspection hatches are in place in each hull.
- The righting line is in the larger trampoline pocket and securely tied to the mast foot.
- The shrouds are not slack.

3. Rudders

Slide each rudder into place on its pintles, ensuring that the retaining clip (arrowed) clicks into place. Note that the rudder arm on the left side is cranked to the right, and vice-versa.

Make sure each rudder is latched securely up (with the blade horizontal).

Attach the rudder bar via the rubber connectors; note that one end of the rudder bar has a piece of tape that corresponds to another piece of tape on the left-hand rudder arm.

Attach the tiller extension to the rudder bar and lay the tiller extension forwards across the trampoline.

TIP: make sure that the plastic covers on the rubber connectors are pushed fully into place; it may help to wet a connector if you are struggling to get it seated.

4. Mainsheet

The rope that controls the traveller (the 'traveller control line') should stay rigged permanently. Also there should be a knot part-way along it - do not try to remove this since it prevents the traveller slamming into the end stops in a hard jybe.

Attach the block with the cleat to the strap on the traveller using the shackle; finger tight is fine, it will not undo itself.

IMPORTANT - make sure you attach the block to the strap on the traveller, NOT to the strap on the traveller cleat or you will bend the cleat.

Grasp the carabiner attached to the top block, put your foot on the rear beam and pull the two blocks apart until there is approximately 1m of mainsheet left outside the blocks. Lay the top block forwards onto the trampoline so that the mainsheet falls do not get tangled.

Tie the end of the mainsheet to the end of the traveller control line; pass a loop of mainsheet through the eye then lock this by passing the knot in the end of the mainsheet through the loop and pull tight.

5. Mainsail, Boom, Spanner and Cunningham

Note that the masts fitted to Boat 1 and 2 are not identical and there are slight differences to how the boats are rigged.

Place the mainsail on the trampoline with the bolt rope forward.

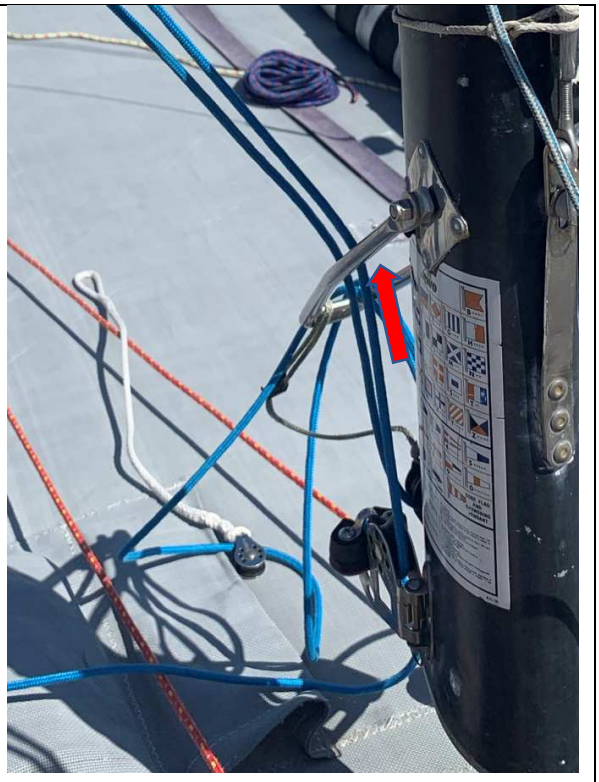
Locate the top mainsail batten (you should find it in the next batten pocket down, sticking out by a couple of inches). Pull it out and push it into the top batten pocket making sure it seats fully into the fitting at the far end of the pocket.

Pass both ends of the batten line through the end of the batten…

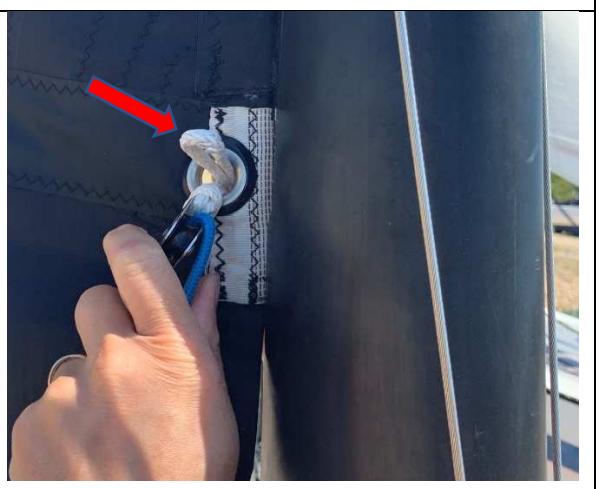
…then one end through the hole in the batten pocket…	
…and tie with a reef knot.	
Attach the mainsail halyard to the head of the mainsail; the shackle pin only needs to be finger tight. Note the orientation of the knot at the top of the ring; this should face forwards. Engage the mainsail into the mast track and hoist the sail. Keep an eye on the batten ends as the sail unrolls to make sure none are loose. You should hear a click when the mainsail lock at the top of the mast engages. Coil the halyard (coil diameter 2-3 hand widths) and place on the trampoline for now.	
Tip: the sail will be easier to hoist if the spanner is held to keep the mast aligned with the sail.	

Cunningham

Pass one of the 2 cunningham blocks up through the spanner (see arrow in picture opposite). The block has a line attached to it with a loop in the other end; pass the loop through the mainsail cringle (below left) and push the loop over the gooseneck and rope loop (below right).



Do the same with the cunningham block on the other side of the mast, passing the loop through the mainsail cringle in the opposite direction to the first cunningham line and pushing the loop over the gooseneck as before.



Boom Boat 1

Slide the boom shock cord knot into the mast and mount the boom on the gooseneck, then slide the mainsail tack into the mast.

Boom Boat 2

Slide the mainsail tack into the mast, then mount the boom on the gooseneck and pass the shock cord plastic ball through the retaining strap (see below).

Spanner

Pass the spanner line (hanging from the cleat on the boom) up through the end of the spanner and through the cleat.

Leave it loose for now.

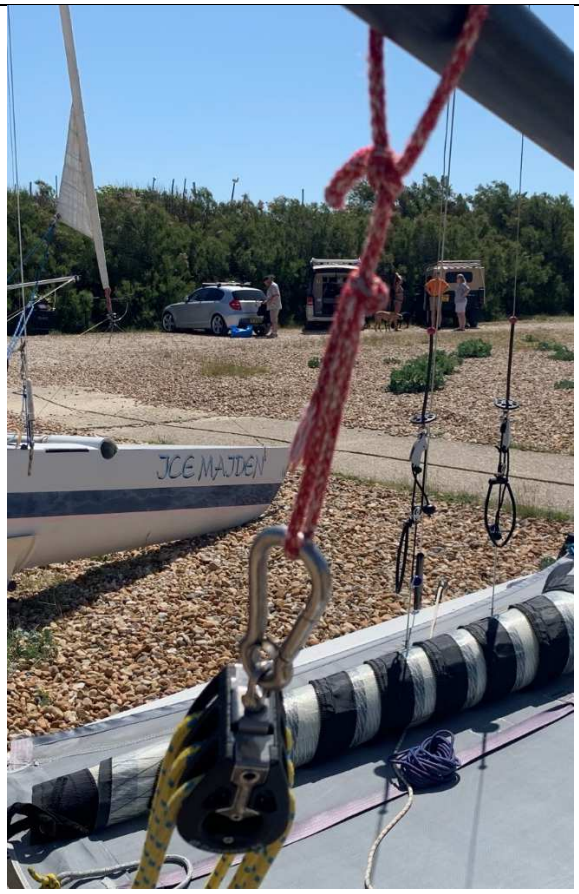
Boom Outboard End – Both Boats

Pass the end of the boom through the top loop of the rope hanging from the mainsail clew plate (the red rope in the picture). If you are struggling to feed the boom through the loop, lift the boom and sail upwards. If you still can't get the boom through the loop, pull it off the gooseneck temporarily.

Take the outhaul line attached to the end of the boom (the blue line in this picture), pass it through the clew plate and push it into the slot in the end of the boom just above a knot.

TIP – the outhaul line controls the tension in the foot of the sail, but this is also affected by the setting of the cunningham and if the outhaul is too tight you may struggle to get the cunningham fully on later. For an easy life, pick the last knot in the line and go from there.

When you are ready to go sailing, connect the mainsheet carabiner to the lower loop in the clew line. But leave it disconnected beforehand.



6. Jib and Jib Sheets

Place the rolled-up jib on the ground with the zip forwards (check the ground is clean first).

Prepare the jib halyard, checking that it is not twisted around itself or the forestay.

Slide the jib halyard hook through the loop in the head of the jib so that the top of the 'S' is pointing forwards

Wrap the jib luff around the forestay and start the zip, making sure that the halyard is zipped inside the luff.

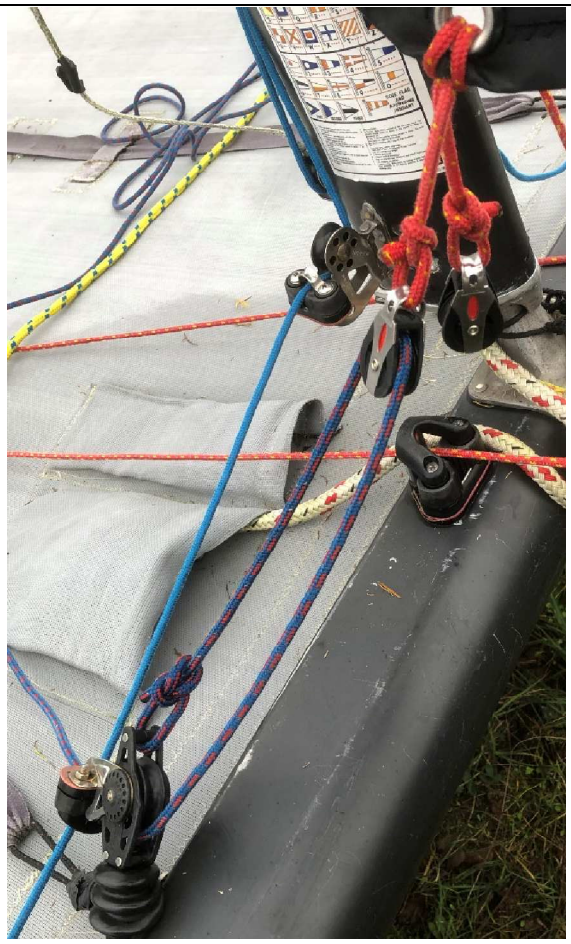
TIP – routing the halyard through the bridle wire eye (see picture) will keep the halyard aligned with the forestay and make the sail easier to hoist.

Hoist the sail, zipping the luff as you go until the jib halyard hook engages with the ring at the top of the forestay.

Untie the lower part of the jib halyard, coil it (coil diameter 2-3 hand widths) and loop it through the mainsheet coil. Then place both into the smaller trampoline pocket.	
Coil the end of the upper jib halyard around your hand and zip into the bottom of the jib luff.	

Hook the jib luff tension control through the jib tack cringle and pull the slack out of the system. Wrap the 3-layer Velcro strap around the forestay and squeeze the layers together well.	
Jib Sheets The two jib clew blocks should already be attached to the jib via a strop. Attach one end of the jib sheet to the becket of one of the jib cleat blocks mounted on the front beam. Use a bowline. *TIP – keep the bowline loop small or you may have trouble sheeting the jib in fully later.*	

Pass the other end of the sheet through one of the jib clew blocks, then back through the cleat block, exiting through the cleat.



Repeat for the other side but in reverse order (i.e. pass the sheet end through the cleat in the cleat block, then through the free jib clew block, finally attaching to the becket on the cleat block with a bowline). Ensure that the jib sheet passes under the cunningham lines (with the Cunningham lines behind the jib sheet cleats) and over the spinnaker halyard.

Happy Sailing!

7. De-rigging

Please wash the boat off (including the sails if they have got wet). But if it's windy, better the sails get put away salty than they get flogged to death.

Position the boat head-to-wind on the stern supports with the wheels pulled forwards so the boat is stable and you can reach the jib.

TIP – when rolling sails, keep the leech parallel and allow the luff rope (or zip) to spiral back along the roll. This will keep the battens straight.

Jib

- Get the main halyard + lower jib halyard out of the trampoline pocket.
- Untie and coil the jib sheet and place it in the smaller trampoline pocket.
- Loosen and disconnect the jib luff tension control.
- Connect the lower jib halyard using a bowline, raise the sail a couple of inches and pull the sail sideways to rotate it around the forestay until the hook disengages from the ring and you can lower the sail, unzipping as you go.
- Slide the jib halyard hook out of the head of the sail and place the sail on the trampoline. Pass the hook through the shackle on the forestay and tie off.
- Roll the sail from the bottom (*TIP – much easier with 2 people*)

Mainsail

- Slacken the cunningham, pull the tack out of the mast then disconnect and remove the boom.
- Remove the cunningham lines from the sail.
- With one person holding the spanner to keep the mast and sail in line, pull on the halyard to raise the sail slightly and whilst keeping the tension on the halyard, rotate the mast as far as possible in one direction to release the sail lock. Keeping the mast rotated, release the halyard and pull the sail down a couple of inches to fully disengage the sail lock. *TIP – if the sail lock does not release, try rotating the mast the opposite way.*
- Roll the sail as it comes down, controlling its descent with the halyard.
- Disconnect the halyard and attach it to the end of the spanner; tie off the other end to keep some tension in the line.
- Untie and remove the top batten, pushing it into the next batten pocket down for safe keeping (leaving a couple of inches sticking out).

8. Spinnaker

The spinnaker should stay rigged, this section should only be required if the spinnaker has been removed for repairs.

You can tell the corners of the sail by the angle that the edges of the sail make with each other:

- Head - much less than 90° (may be marked 'D')
- Tack - slightly less than 90° (may be marked 'A', or have a sailmaker's logo nearby)
- Clew - more than 90° (may be marked E)

Find the tack of the sail; it may be marked with a 'A' or the sailmaker's logo. Attach the tack line with a bowline, keeping the loop small.

Locate the 2 halyard patches on the starboard face of the sail. Take the end of the halyard that passes through the spinnaker sock, passing it through the first patch and tie off with a bowline to the second patch, keeping the bowline loop as small as possible.

TIP – it is easiest to find the patch first and then thread the halyard. To find the patches it is easiest to work your way from the tack along the luff of the sail. Keep hold of the first patch by sticking your little finger where the rope will go, leaving the rest of your hand free.

Find the head of the sail (again it may be easiest to start at the tack and work your way along the luff until you get to the head).

Tie the halyard to the head using a bowline, keeping the bowline loop as small as possible.

Go back to the tack again, but this time follow the foot of the sail until you get to the clew. Tie one end of the spinnaker sheet through the clew cringle with a bowline.

TIP – this is easier if you can hoist the sail, but only do this if the wind is light!

Pass the other end of the sheet:

- Through the nearest spinnaker sheet block
- Over the spinnaker halyard
- Through the other spinnaker sheet block
- In front of the forestay

… and tie through the clew cringle with a bowline.

Note that the spinnaker sheet block locks in one direction when under load; make sure that you rig the sheet through the block in the right direction.