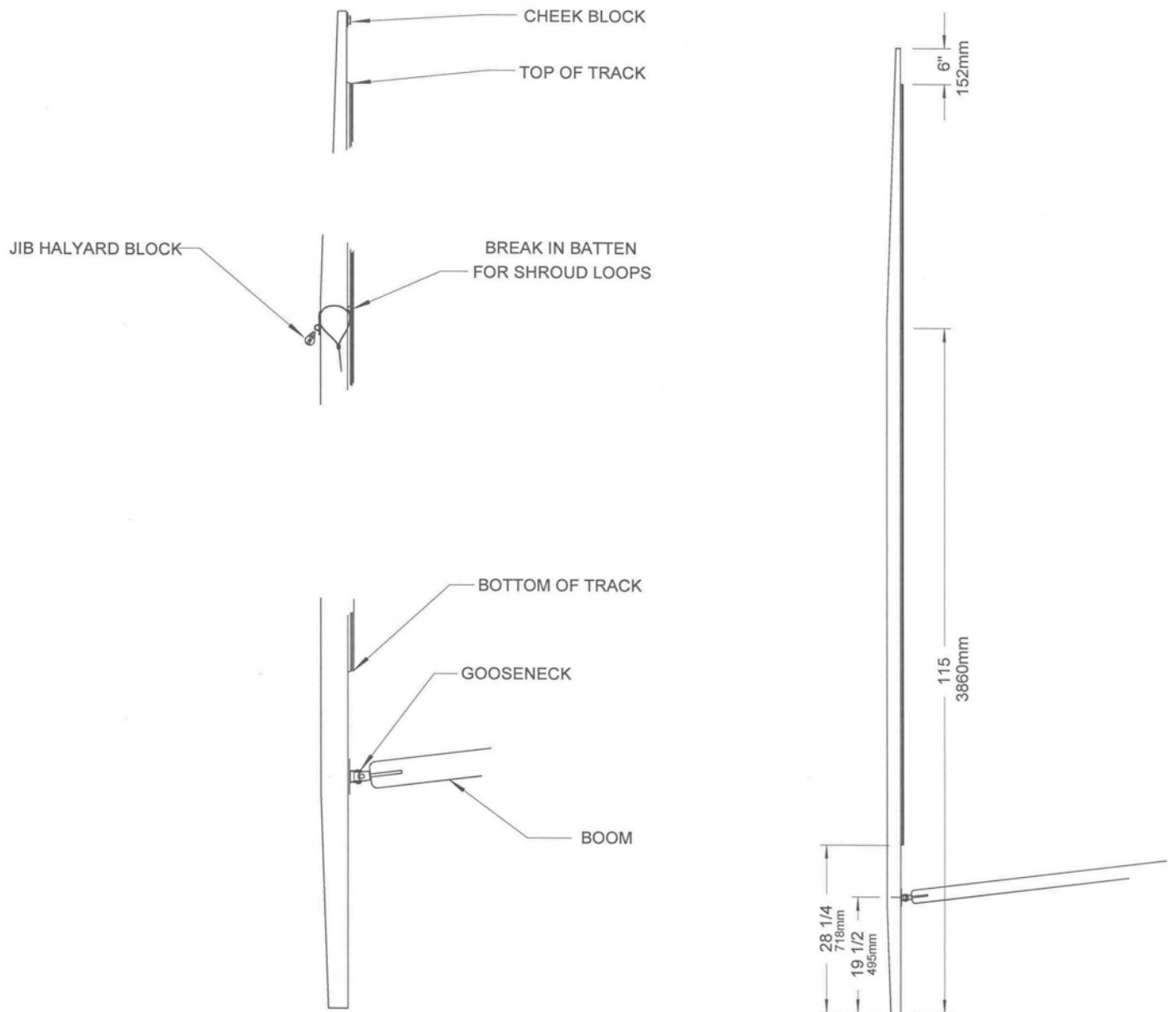


Appendix 1: How To Install the Northeaster Dory Sailing Component Kit Upgrade



Northeaster Dory Sailing Rig Upgrades:

Adding sail track, an outhaul, and camcleats for the jib

We'll start with the mast. Stainless track will allow you to raise and lower the mainsail with a halyard, instead of furling the sail around the mast like a Laser dinghy or traditional dory.

The stainless steel mast track is mounted on a thin wooden batten which will be epoxied to the back of the mast. The batten allows the track slides to move more easily, and it avoids the need for expensive hardware to fasten the stays to the mast.

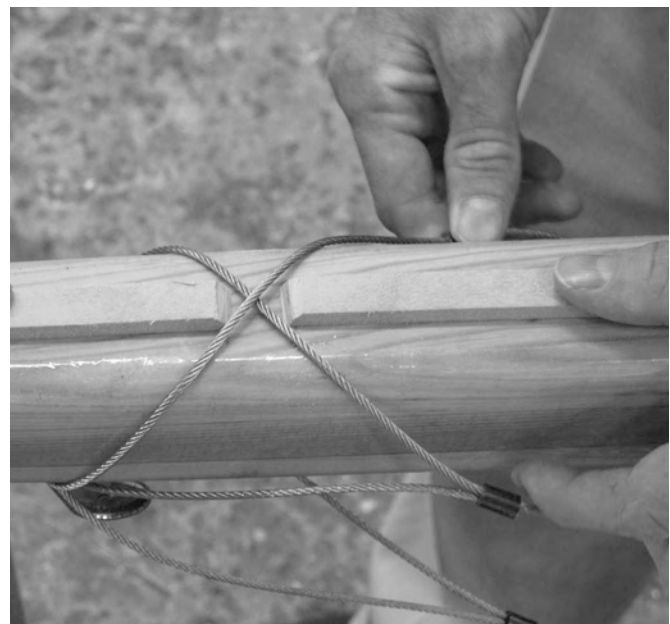
Your mast will need to be epoxy-ready, so if you're retrofitting to a varnished mast, you need to sand the varnish off of the aft face of the mast.

You'll need 127" (3226mm) of batten with a cross section measuring 3/4" x 1/4" (18mm x 6mm).

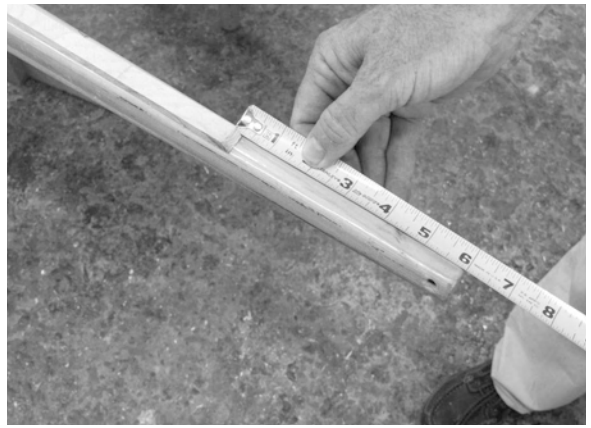
The batten needs a gap where the side shrouds cross on the aft face of the mast.

If you're working from a CLC kit, the batten is in two pieces. Put the break between the lengths of batten at the shroud crossing point, 115" (3860mm) above the base of the mast.

The gap in the batten should be about 1" (25mm).



The batten ends 6" (152mm) short of the top of the mast, and 28-1/4" (718mm) short of the bottom of the mast.



The eyestay on the front of the mast carries over from the stock rig (see page 129 in the Northeaster Dory manual).

The bolts that secure it, however, will be in the way of the track on the aft face of the mast, so they need to be countersunk into the batten as shown here.



If you are retrofitting the track to your mast, you need to sand off the varnish where the batten will be epoxied to the mast.

Our mast was retrofitted, so we taped off where the batten is glued, and sanded off the varnish completely.



Epoxy should be thickened to a mustard-consistency paste and applied to the batten.



Put your first clamps at the shroud location, so that the vital 1" (25mm) gap is preserved.



Here's the rest of the batten clamped to the mast, epoxy curing.



Once the epoxy has cured, remove the clamps, sand the batten smooth, and apply layers of epoxy and varnish. Notice we've protected our varnished mast with more masking tape.

If you aren't retrofitting, this is the moment to sand and finish the entire mast and boom, before you attach all of the hardware.



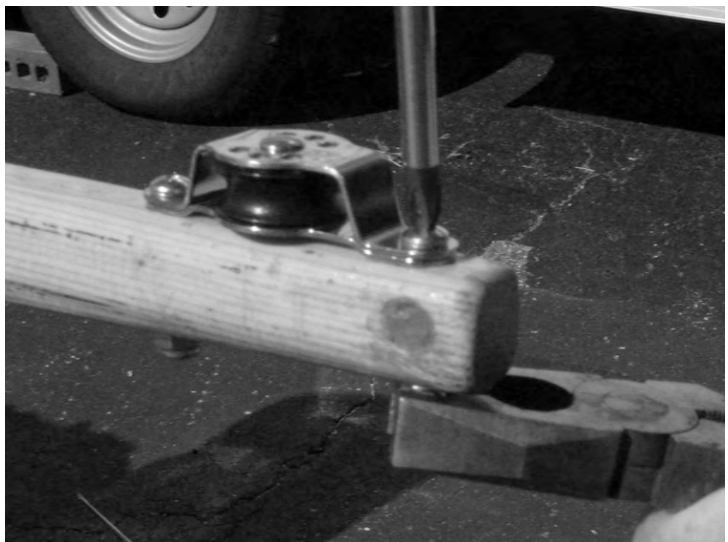
The halyard for the mainsail runs through a small cheek block through-bolted with #8-32 x 1" (25mm) stainless steel machine screws at the very top of the mast.

The top of the mast, the diameter of a broom stick, is more than strong enough for the stresses, but you need to drill carefully for the screws.

If you are retrofitting the track to the mast, fill the old hole with wood flour-thickened epoxy prior to drilling the new one. This filled hole is visible in these photos.



As always, put a dab of caulk in the screw holes before fastening the cheek block permanently.



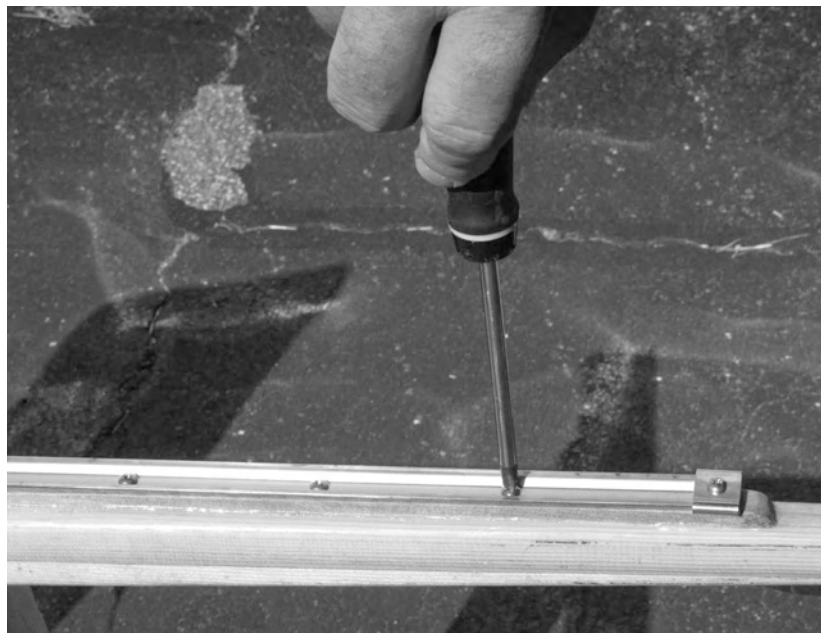
The completed halyard block installation.



The mast track is screwed to the mast with #6 x 3/4" (18mm) screws.

The mast track can't be shipped in long lengths, so you'll have a joint in it. Position the joint on the lower half of the mast. Use a metal file to smooth the ends of the track, both so it won't scratch you or the boat and so that the sail slides can negotiate the joint without issue.

(Paraffin is the perfect lubricant for sail track.)



Here's a view of the sail track bridging the gap left for the shrouds.



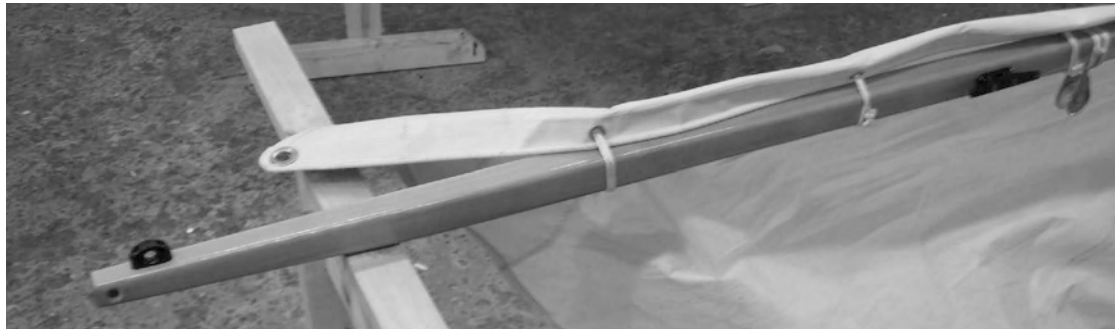
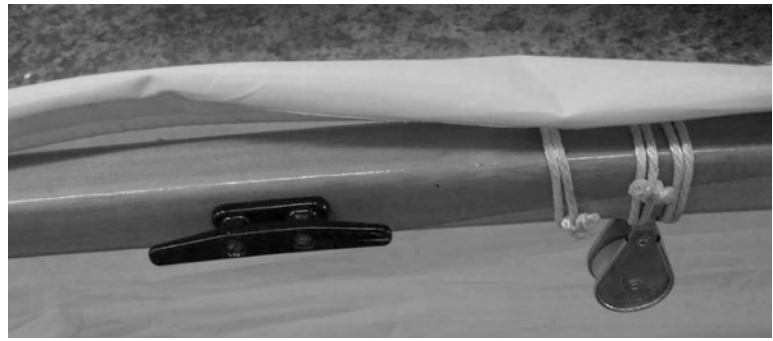
An outhaul for the mainsail is added to improve sail shaping, to make it easier to drop the boom when the halyard is loosed, and to facilitate reefing if that option is chosen.

Here's the fairlead screwed into the boom with #8 x 1-1/2 (38mm) stainless steel panhead screws.

The hole for the standard lashed arrangement becomes vestigial on our retrofitted version.



Further forward on the boom, within easy reach, you'll install a 4-inch (100mm) cleat with two #8 x 1-1/2 (38mm) silicon bronze screws.



The foot of the mainsail is still laced to the boom per the stock version---don't be tempted to use this particular sail loose-footed. However, the lacing should be loose enough to allow the foot of the sail to slide on the boom.

Here's the outhaul in action, a bit of 1/4" (6mm) line fastened to the clew of the sail and led through the fairlead forward to the cleat.



You will need to install a new cleat for the main halyard on the side of the mast. We put ours a few inches down from the gooseneck. Use #8 x 1-1/2" (38mm) silicon bronze screws.

A little below that on the front of the mast is your existing jib halyard cleat.



You will need these slides fastened in the grommets along the luff of the mainsail so that it can slide on the track.



The upgrade kit's swiveling cam cleats are fastened atop the forward corners of the middle thwart, in the same location as the fairleads in the stock kit. Use #8 x 1" (25mm) screws.

These will make it easier to manage the jib sheet on all points, particularly singlehanded.



Here's a view of both swiveling cam cleats in place





The sloop-rigged Northeast Dory. Could use a little more downhaul tension, or a little less outhaul tension, to take that wrinkle out of the foot of the sail.

Have fun! Remember, always wear a personal flotation device when on the water, sail upwind of home, and watch the weather. If you're new to sailing, get professional instruction, and find an experienced sailor to join you on your first outings in your Northeast Dory.