

the 6" Balmain Bug



An Australian Classic by www.go.spectre.com

the 6" Balmain *Bug*



Your Bug!

Welcome to the Balain Bug experience!!!!!!

The Bug kit has been designed so as to be a modern version of the "Traditional Bug" now you can sail like they did over 100years ago!

Traditional bugs mostly had varnished wooden hulls, (there were even paper mache bugs made!) your bug is a modern yacht and uses modern materials.

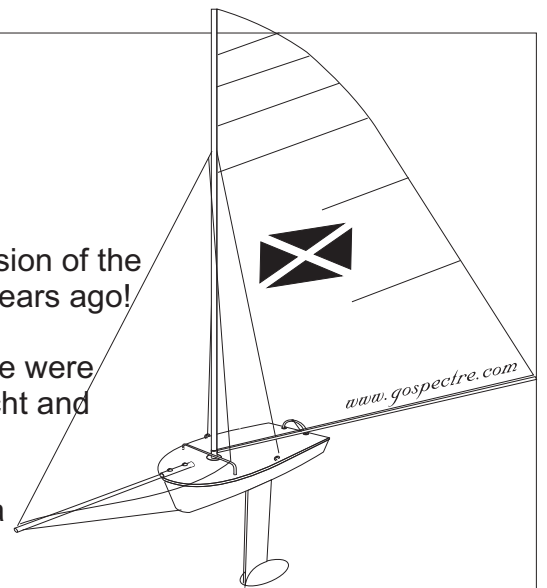
Choose a wood stain and varnish to finish your bug, add a sail logo and make her your own modern classic.

If you want to use radio gear, you can add it carefully or even convert the keel to be an assembly that slides fore and aft on a rail like traditional bugs, but we have made this kit with a fixed position so you can sail easily with less to fuss about!!

Just add glue and a few tools to the package and off you go to build her, the keel bulb has been made slightly heavier than you need so if you are not using remote gear she will float well. It is worth noting that bugs float with the waterline around 15-20mm below the deck, looks weird, but thats how they hold so much sail!

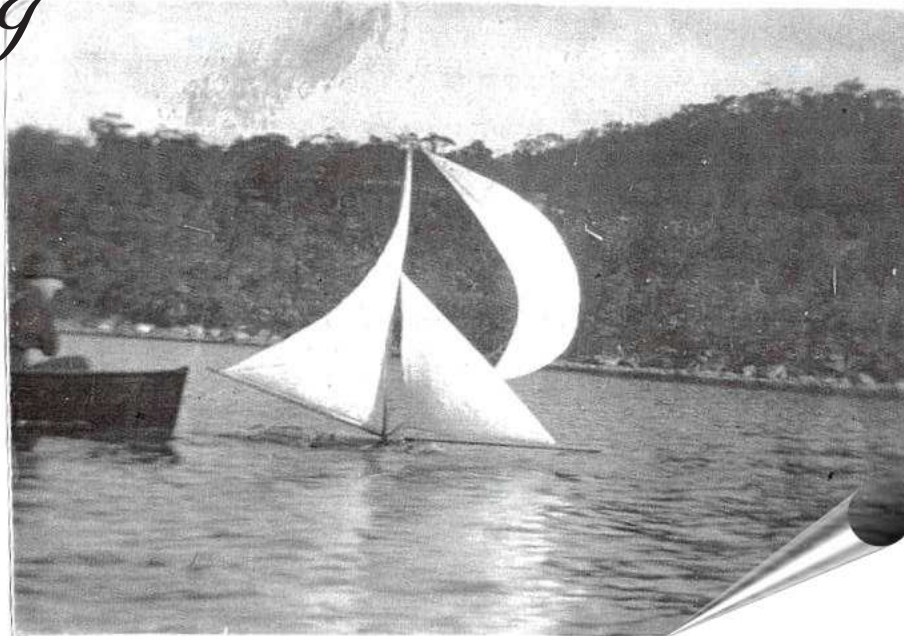
Take care, read the instructions and build a classic, then sail her!

Race her even, but above all, enjoy



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Bug on the run! This Bug is seen with the 'big' rig and features a spinnaker sail as well as the normal mainsail and jib. Early Rigs had a 'Gaf' rig while later boats mirrored real boats and the development of a single light, long mast.

History

Somewhere around the year 1860 the world famous 18foot skiff came into existence, these dinghies had as the name implies a hull length of 18foot not including the bow sprit and very few other limitations, if you could keep the boat up right, as much sail as you could carry was fastest!!

The boats developed highly and even to this day the 18footer still is a grand prix class known for its wild flights of speed and overpowered sail plan.

The early 18 footers had colored patches on their mainsails to identify them to the masses of people who would gather around Sydney Harbor to watch, the modern skiffs have brighter color schemes, still with the addition of sponsorship and bright colored paints.

Early on the Balmain Bug model skiff came into existence and followed a similar rating rule as the real boats, limited hull length but nothing else, they also used sail patches.

Boats were at first sailed on ponds and turned around at each end to complete a course, then later in the open sea of Sydney Harbor, rowing boats were used to chase the little monsters and even put on more sails downwind.

Bugs were raced in several class sizes, 6 inch, 12 inch and 2 footers. The smallest that raced in open water was the 12"er, and it also made a great pond racer, the largest was a 2 Footer Bug, that really took some rowing to keep up with!

The Balmain Bug was raced up to around 1954 in Sydney, lets re-ignite it!!!!!!



18foot skiffs pics by Andrew Cook

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Sailing



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Sailing

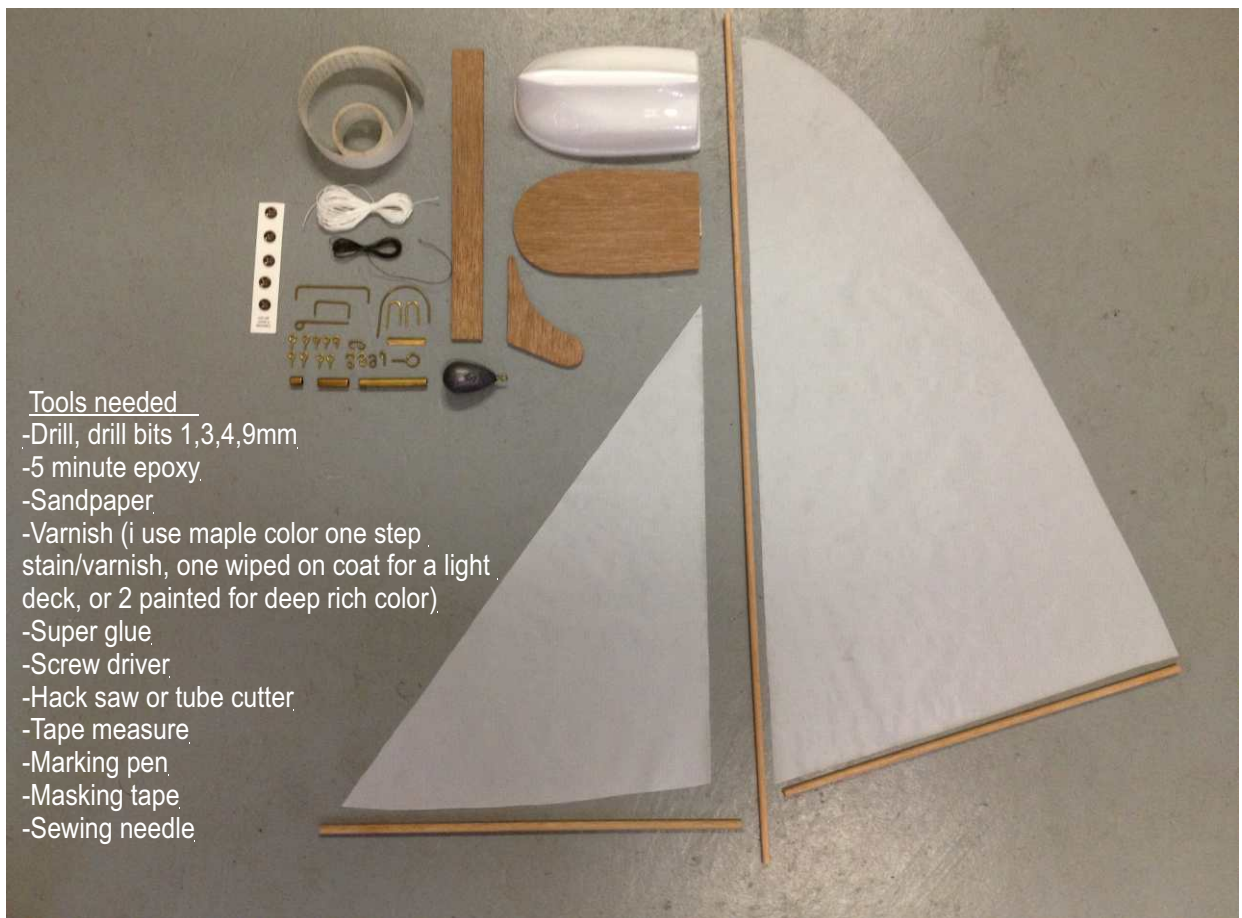


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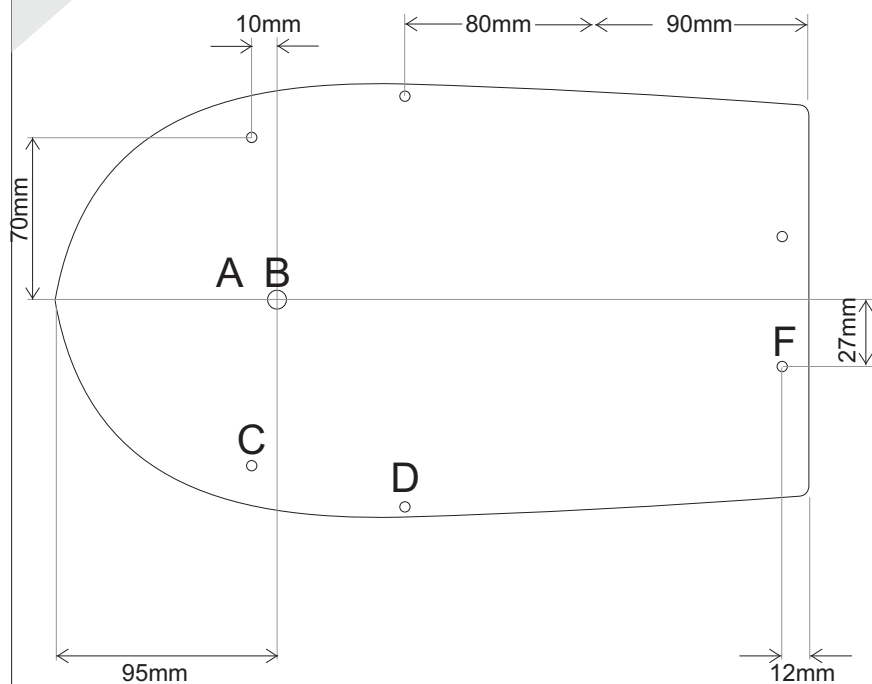
Parts



Tools needed

- Drill, drill bits 1,3,4,9mm
- 5 minute epoxy
- Sandpaper
- Varnish (i use maple color one step stain/varnish, one wiped on coat for a light deck, or 2 painted for deep rich color)
- Super glue
- Screw driver
- Hack saw or tube cutter
- Tape measure
- Marking pen
- Masking tape
- Sewing needle

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1. Drill pilot holes in deck at locations shown in picture on left.

Hole A- for jib (fore sail) sheet x1

Hole B- for mast tube x1

Hole C- for jib traveler x2

Hole D- for mast stays (shrouds) x2
note : see step 4

Hole E- for spinnaker sheet x2

Hole F- for mainsheet traveler x2

Then stain and varnish the deck.

Deck holes

Sailing terms:

Jib - the sail at the front of the boat.

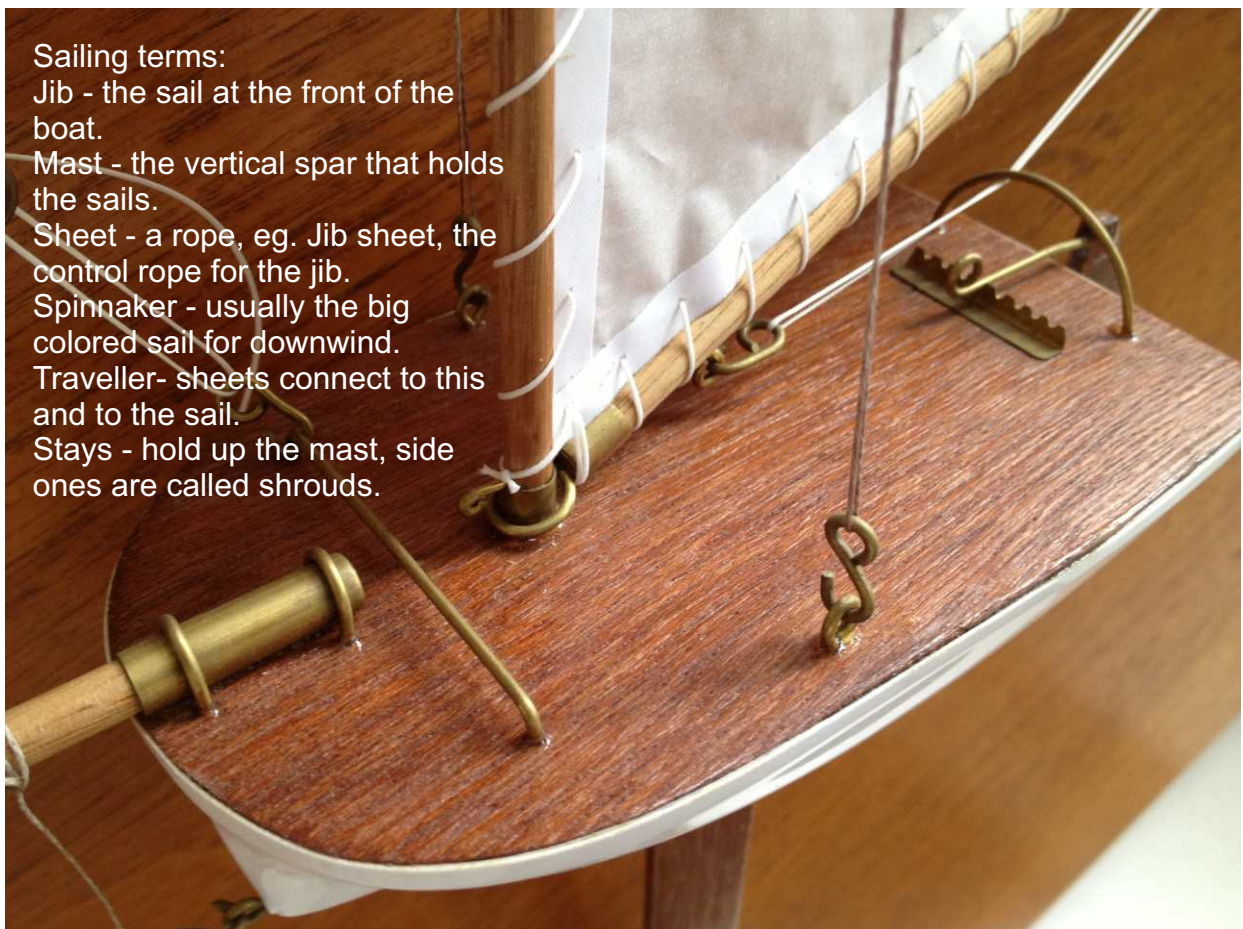
Mast - the vertical spar that holds the sails.

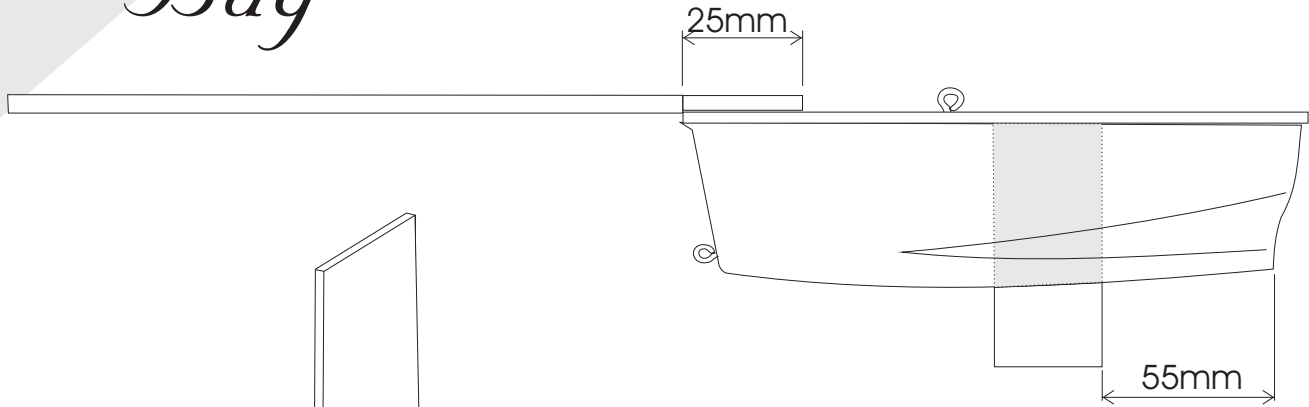
Sheet - a rope, eg. Jib sheet, the control rope for the jib.

Spinnaker - usually the big colored sail for downwind.

Traveller- sheets connect to this and to the sail.

Stays - hold up the mast, side ones are called shrouds.

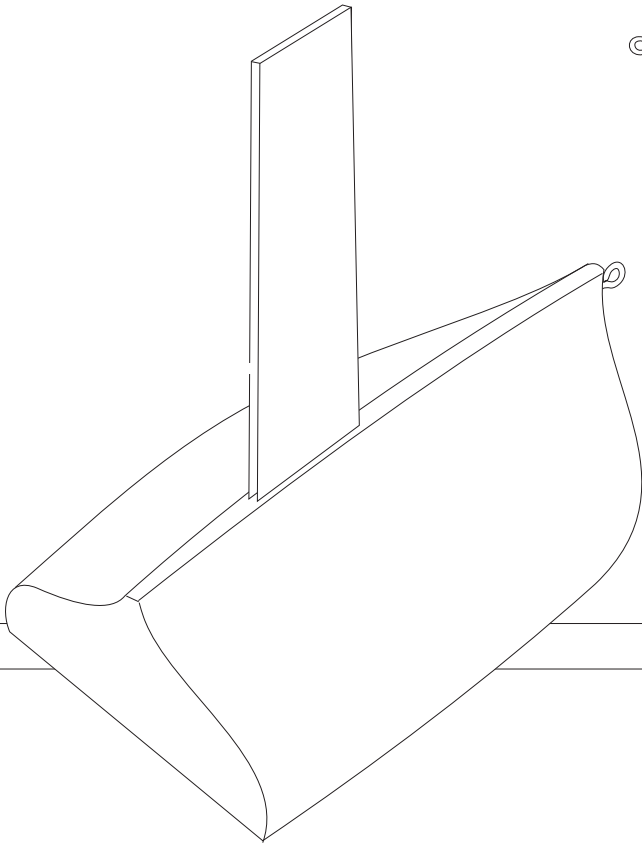




2. Cut keel slot and fit keel

Approx 55mm from transom, on centre line, cut a slot to suit the keel fin.

(note traditional bugs had sliding fins, pics of a set up further on if you wish to adapt!)



Trial fit the keel fin into the hull.

The fin will butt up against the underside of the deck.

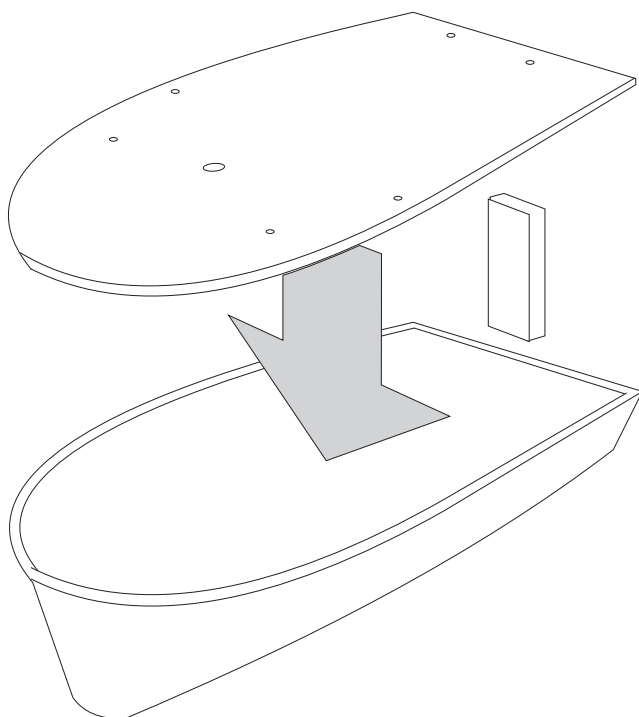
Tape around the slot in the hull with masking tape to catch epoxy that squeezes out.

With fin touching deck, mark height, remove deck and lightly superglue fin from inside hull to locate for epoxying.

Fit a reinforcement patch to rudder area and if necessary to the bow for the bow sprit eyelet, epoxy these in.

Bow eyelet for bow sprit can be fitted and epoxied from inside hull as reinforcement.

Refit deck and mark holes for bow sprit fitting hoops, position of tube as above.



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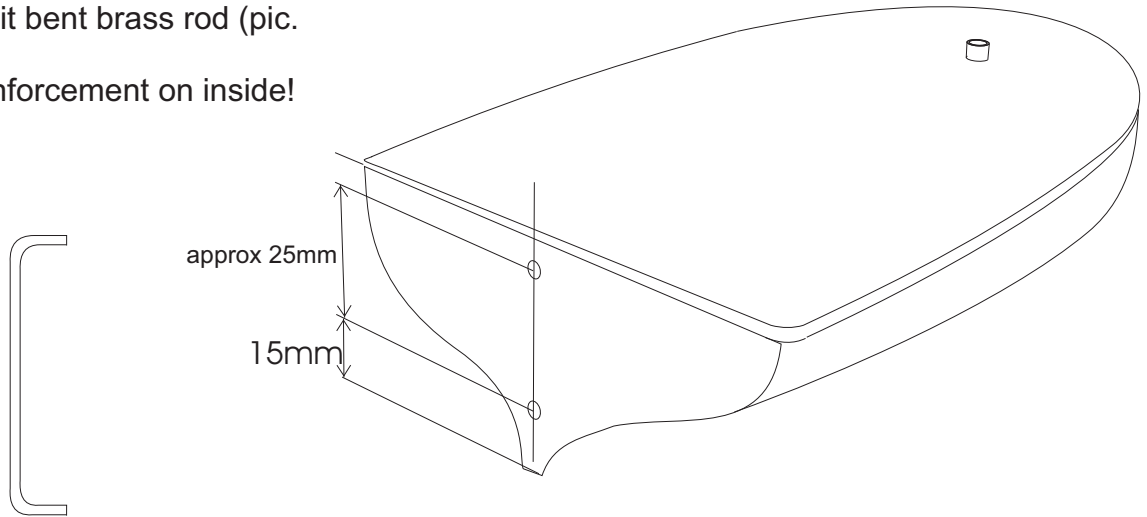


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3. Drill the transom holes

Place masking tape on the transom and mark hole centres on it (the tape will help avoid cracking or scratching the hull). As per picture drill holes to suit bent brass rod (pic. left).

Remember reinforcement on inside!

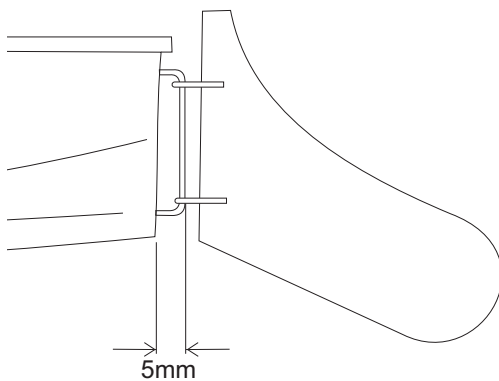


4. Fit rudder pintel .

As per drawing the pintel will sit approx 5mm proud of the transom.

Fit rudder gudgeons to pintel.

From inside the hull glue pintel with 5 min epoxy.

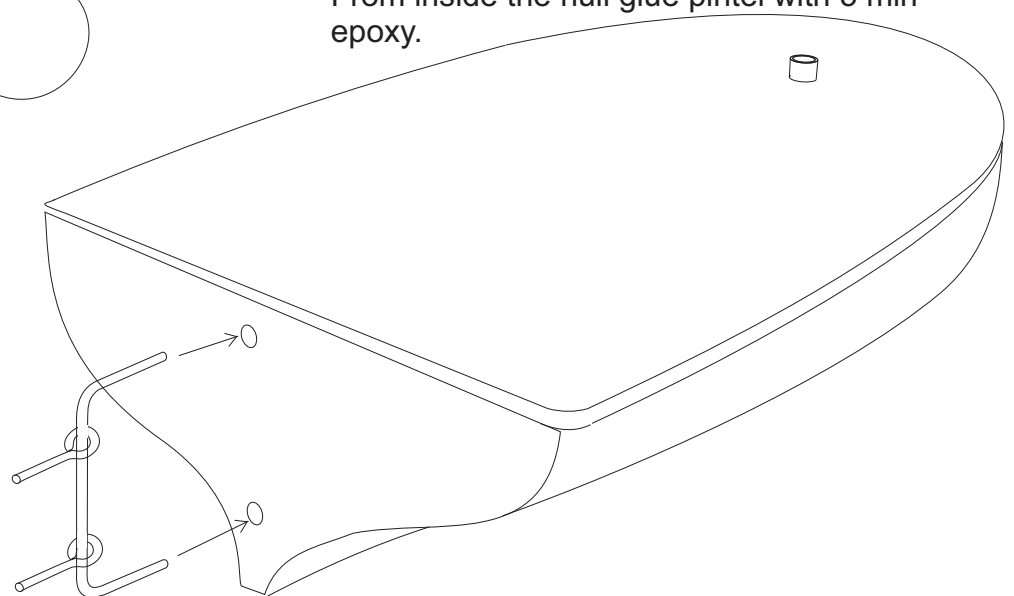


Sailing terms:

Transom - the rear face of the yacht, in this case where you are drilling the holes.

Pintel - the pin that holds the rudder to the hull fixtures.

Gudgeon - the hull fixture through which the pintel locates, pintels can be on the hull with gudgeons on the rudder in some cases.



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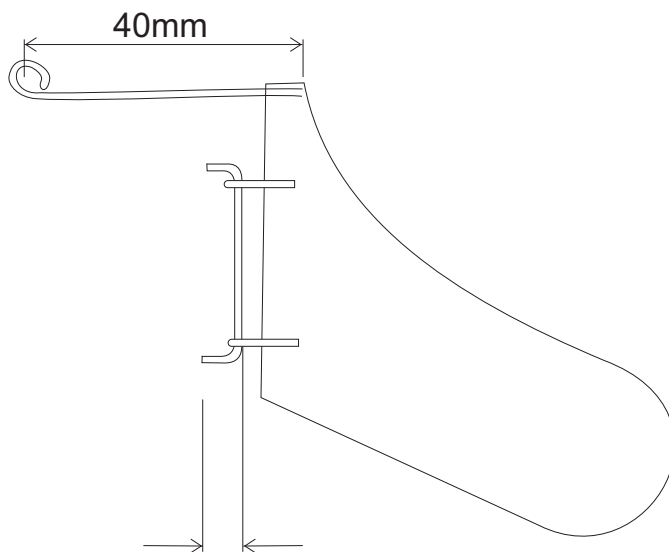
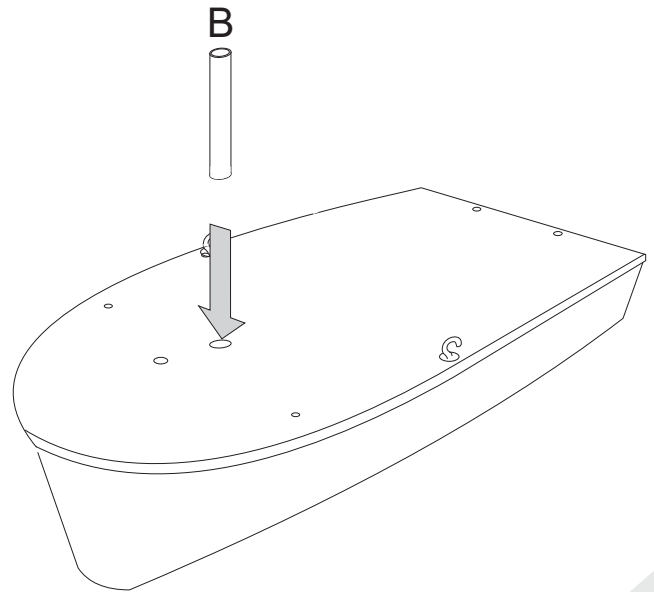
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5. Install mast tube.(B)

Place a section of mast (pre fit and sand if required) and check mast alignment fore and aft as well as side to side.

With the mast 90 degrees to the deck from each plane , glue the tube into the deck.

Once set, a small amount of glue down the tube to join the tube o the hull.



9. Fit rudder

Drill rudder blade to accept pintels (see side view).

Cut tiller to length and if required file , then glue in position.

Sailing terms:

Rudder - the big board that steers the yacht!

Normally attached to the yacht owner.

Tiller - the steering stick that the owner holds on to to try and control the rudder.

Nut - the bit connected to the tiller, see owner.

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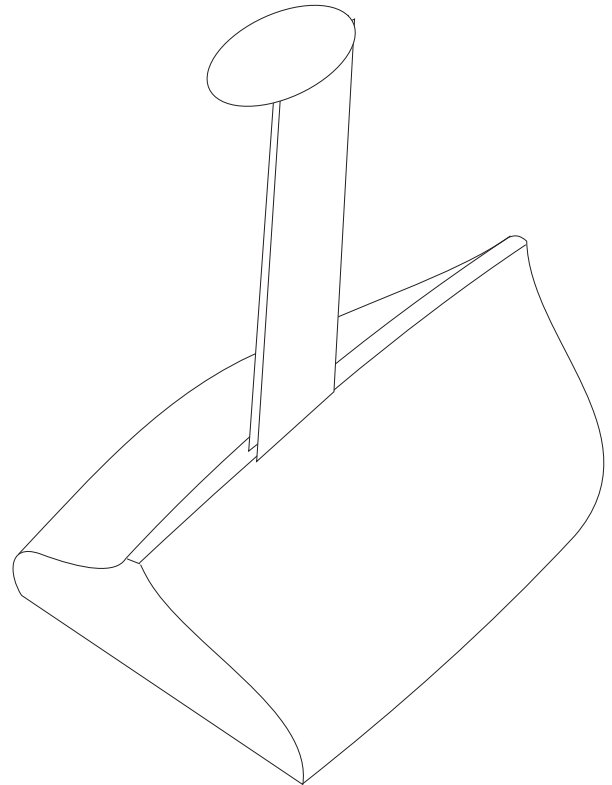
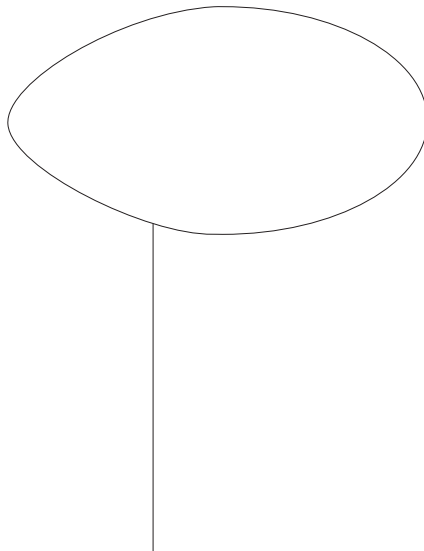


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7. Fit bulb

Epoxy bulb onto the fin and leave to cure. If you are in any doubt to your glueing skills you can always drill a hole through the bulb and fin and use a bolt to pin it in place.



Sailing terms:

Keel - the big board that hangs down from the hull. Provides stability to stop the yacht drifting sideways when sailing.

Bulb - the weight in the end of the keel fin.

Sometimes yachts have weighted keels with no bulb.

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Sailing terms:

Main sail - normally the big sail, the one at the back.

Aft - back , rear ward end of the yacht, the stern.

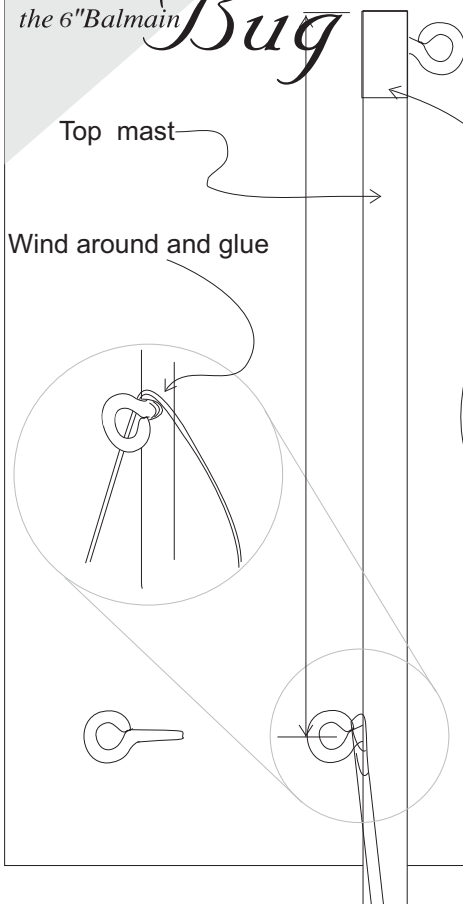
Fore - as in forward end, the bow.

Bowsprit - the spar at the bow of the boat projecting forw"d of the hull.

Bobstay - the stay from the end of the bow sprit to the hull, normally tensions the bowsprit downwards inducing an arc in the bowsprit.

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8. The mast and rigging

Use eye screws to hold sails to mast in the following locations.

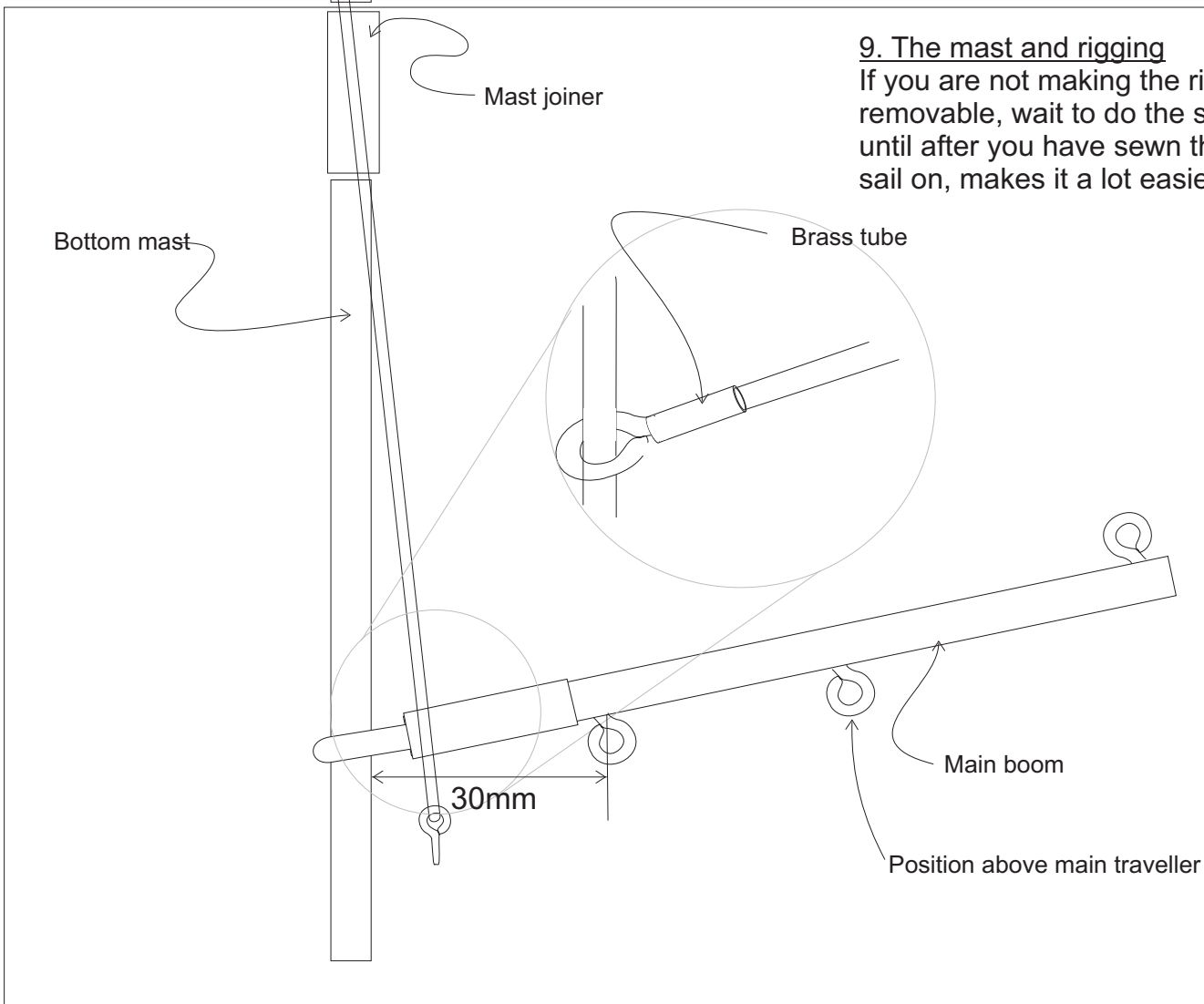
You can also paint the ends of the spars white for a classic look

Sailing terms:

Main boom - the spar for the mainsail, normally near your head, makes a boom noise if you do not duck.

Gooseneck - the joiner between main boom and the mast that allows movement.

Main sheet traveller, on the bug this is the hoop at the aft section of the deck that the main sheet goes through, controls sail "sheeting angle".



9. The mast and rigging

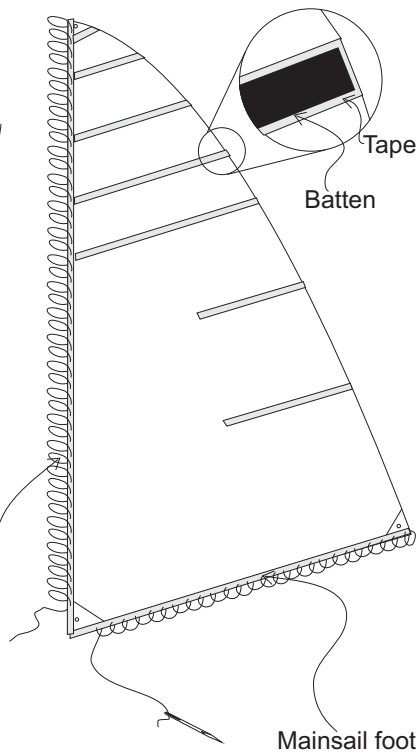
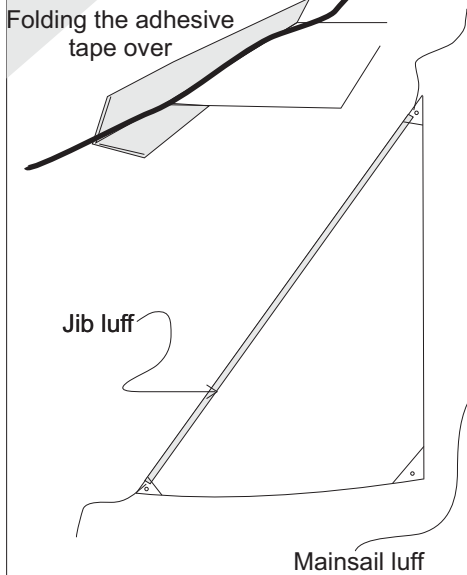
If you are not making the rig removable, wait to do the shrouds until after you have sewn the main sail on, makes it a lot easier!

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10. Sails

Fold the white self adhesive sail tape length ways and stick it along the luff and foot of the main sail so that it sticks to both sides of the sails (see inset pic.). Then stitch the main sail onto the mast by using a needle to pass the thread through the sail, around the mast and through the sail again. Space holes about 15mm apart, or further dependig on the classic look you wish to acheive.

With some of the tape attatch batten to the main in the shown positions.

Use tape along the luff edge of the jib and enclose a piece of the string before folding it over, this will be

Sailing terms:

Luff - the front edge of a sail

Foot - the base edge of a sail

Leech - the third edge, normally the back edge.

Tack - the front corner of a sail, where it is tacked down to the deck.

Clew - the outer corner attached to a sheet

Head - the top corner of a sail , also the term for a toilet on a yacht.

Add a logo to your mainsail like a traditional bug, see examples further on!



The standard rig



The big rig!
Also has a spinnaker

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Sliding Keel option.

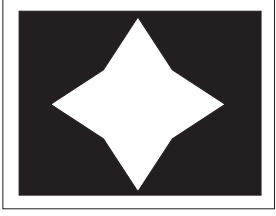
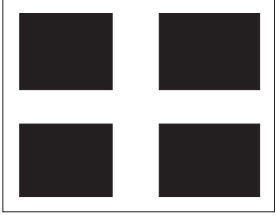
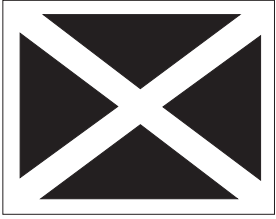
The majority of traditional Balmain Bugs had sliding keels so as to enable you to adjust sailing balance with the rig and keel. That's a lot to deal with!

If you decide to convert your kit to a slider, here's a suggestion of how to do it!

On the inside of the hull a timber block to screw into permits the use of brass strip for a keel rail.

Fabricate the claws by bending brass strip and allow room for screw heads so you can slide fore and aft.

At the front end of the rail, the forestay hooks on and stops keel coming off, while the rudder fits to the aft hole in rail and when removed allows you to take off the keel!



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