Building instructions FOLKEBOOT

Order-No. 20400

Congratulations on your purchase of the Folkeboot. This model is designed as a static model. For operation in the water, the double-sized model (order no. 20390) is available with all accessories. This model can still be opened to allow a view into the internal framework. The kit is essentially intended for advanced modellers. In particular, knowledge of staining the wooden parts and then working them is required. When staining, always carry out tests on leftover pieces first.

You will need the following adhesives, fillers and paints to build the model:

- Superglue Roket hot 20g thin (order no. 44050)
- Superglue Roket rapid 20g medium (order no. 44051)
- Wood glue UHU Holz water-resistant 75g (order no. 48515)
- Windowpane glue, R/C Modeller Canopy Glue (order no. 44126)

- Pore filler (Lord Nelson pore filler order no. 80110)
- Clear lacquer silk matt (order no. 80112)
- Stain (order no. 349105, 349108, 349111, 349114, 349117) depending on the colour required
- camouflage brown 27 (order no. 316027)

The following tools are the basic equipment for building the Folkeboot:

- Building board min. 55 x 15 cm (e.g. order no. 81956)
- Craft knife (order no. 416001)
- Hand drill handle (order no. 455661)
- Sandpaper holder (order no. 490101)
- Sandpaper grit 180, 320, 400 and 600 (set order no. 490190)
- Drill bits Ø 1 mm, 1.5 mm, 2 mm
- Side cutters (order no. 455550)
- Fastening clamps (order no. 473770)

PVC adhesive tape or paper adhesive tape is required for masking when painting. You will find suitable adhesive tape in the Krick range, e.g. under order number 493274. This adhesive tape is available in different widths. Do not use crepe tape!

The components on the laser-cut sheets are already marked with their part numbers. When building the model, carefully remove only the parts you need using a sharp craft knife.

If you get stuck with the construction of the model, contact an experienced modeller. They will be able to help you with questions and problems and guarantee that your own "Folkeboot" will be a beautiful model. If you do not have an experienced model builder in your circle of friends or acquaintances, please contact a model boat club in your area or ask for the address at the local model boat shop where you bought the kit. Every model boat club has active model boat builders who will be happy to help you.

The construction of the model is made easier by the numerous photos of the construction stages.

Please note: Some of the photos used are of the prototypes and some of the components and materials used (types of wood) do not correspond to the components used in the kit.

When bonding laser parts, it is important to sand down the burnt edges of the laser. These burnt edges do not bond with adhesives of any kind.

We hope you enjoy building your Folkeboot.

I. SLIPWAY, BOAT STAND and HULL

Stage 1, boat stand

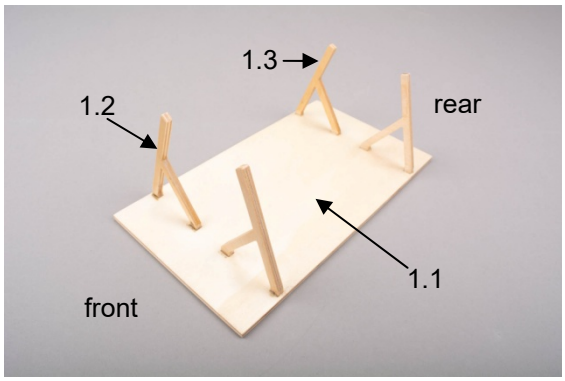


Fig.: Boat stand

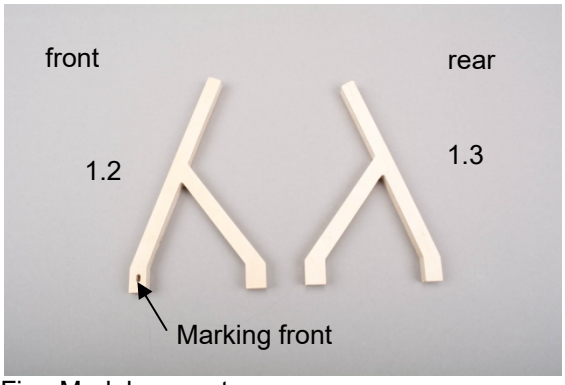


Fig.: Model supports

Make the boat stand from parts 1.1, 1.2 and 1.3. The front supports are marked in the base. The glued stand is then sanded clean and painted.

Stage H, Building Slipway

To build the hull, you will need a building shell. You will need a board measuring approx. 55 x 15 cm. The board should be straight and not warped. A piece of blockboard is best suited.

Glue the hull together from parts H1 to H3.

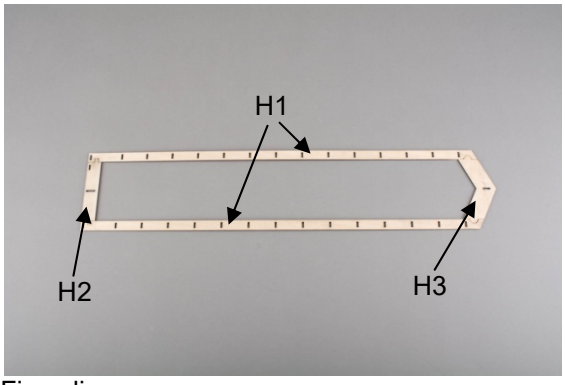


Fig.: slipway

Cover the building board with plastic film so that the slipway and later the inserted frames do not stick to the board.

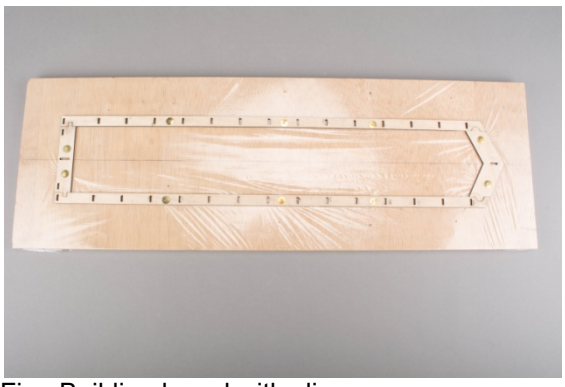


Fig.: Building board with slipway

Stage 2, hull

First remove the dark laser burn on the keel parts 2.1, 2.2, 2.3 with sandpaper. You can use wooden strips with sandpaper glued onto them.

The keel can now be glued flat.

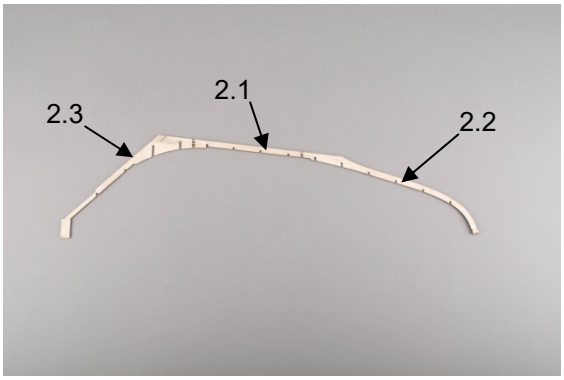


Fig.: Keel glued

In the next step, place the frames part 2.6 to 2.19 in the slipway and fit the keel.

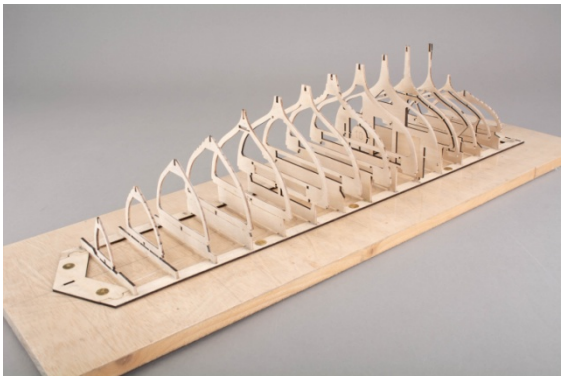


Fig.: Frames arranged

Fig.: Keel fitted

The supports H4 are inserted for the transom.

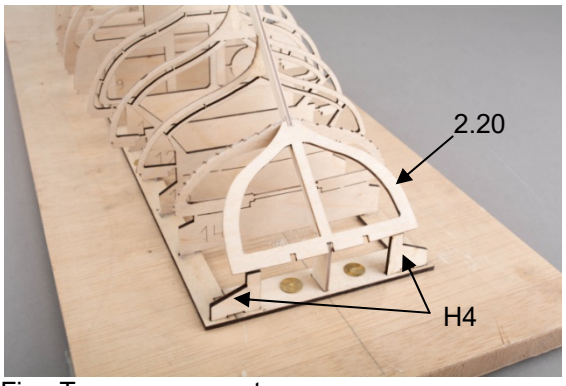


Fig.: Transom supports

Attach the supports H4 to the stern bulkhead 2.20 with a drop of superglue so that they can be removed later.
Next, glue on the reinforcements 2.4 and 2.5 for the keel bolts. First glue on the reinforcement on one side and then cut out the bars in the keel. Then glue the reinforcement on the 2nd side.
However, you can also drill through the webs with a 2 mm drill after gluing the reinforcements on both sides.

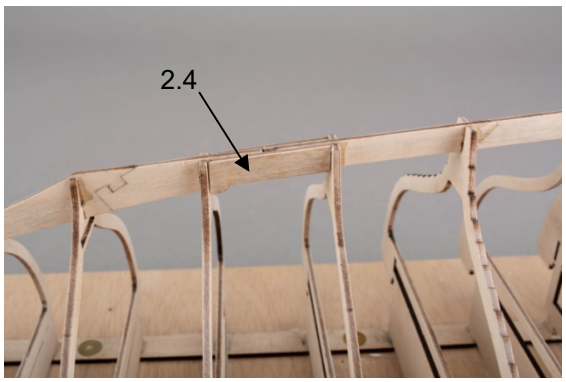


Fig.: Keel bolt reinforcement at the front

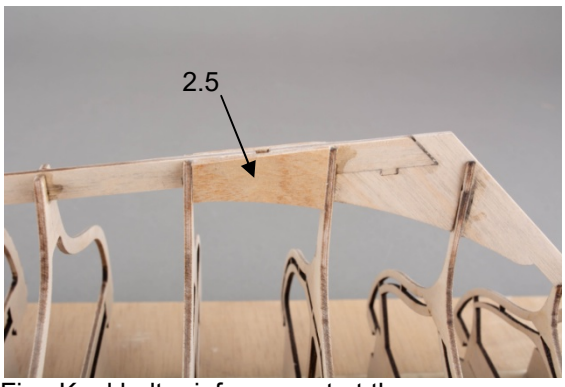


Fig.: Keel bolt reinforcement at the rear

Adjust the glued-in reinforcements to the frames and sand the transitions.

In the next step, glue on the keelboard 2.21 so that the holes are above the cut-outs in the keel.

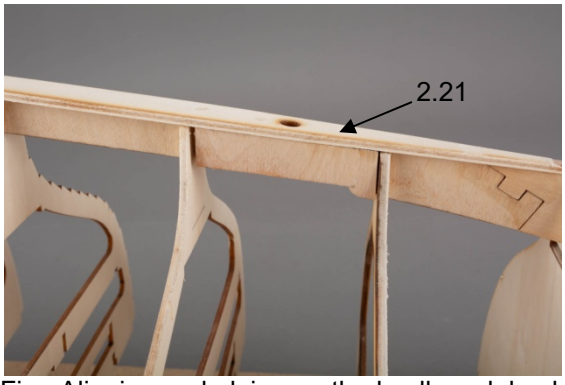


Fig.: Aligning and gluing on the keelboard, keel bolt at the front

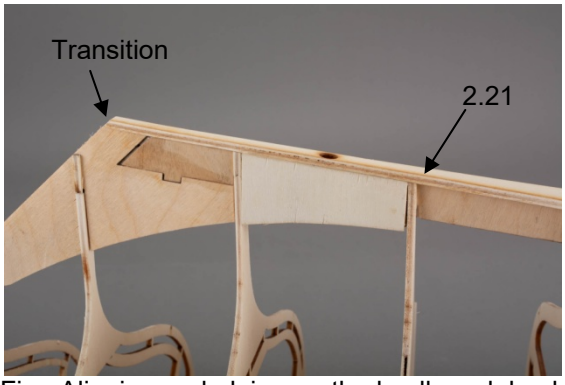


Fig.: Aligning and gluing on the keelboard, keel bolt at the rear

Sand the transition at the stern and bow to fit. Next, glue 2 plywood strips 2.23 to the bow stem.

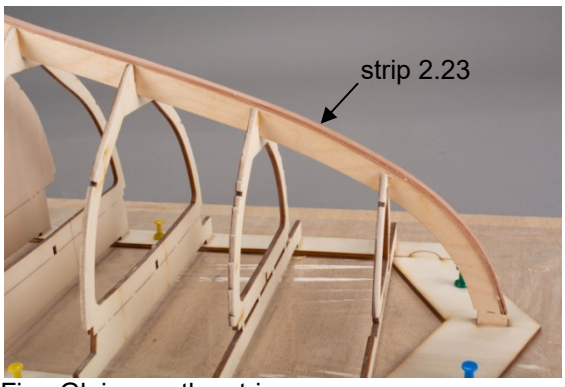


Fig.: Gluing on the strips

Bevel the strips and also the frames to match the course of the planks. Bevelling the frames is particularly important for the bow frames. This ensures that the planks are well seated.

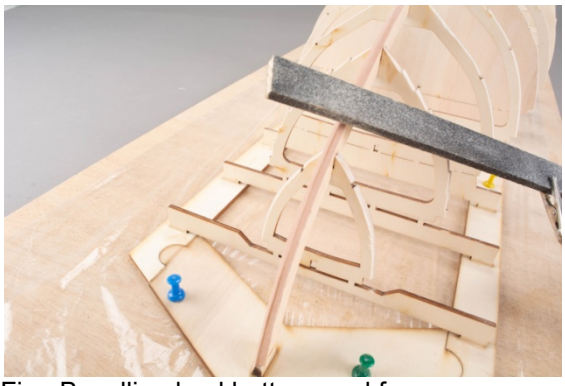


Fig.: Bevelling keel battens and frames


Fig.: Bevelling the frames

In the next step, glue the transom 2.41 in place and straighten - bevel - according to the course of the planks.

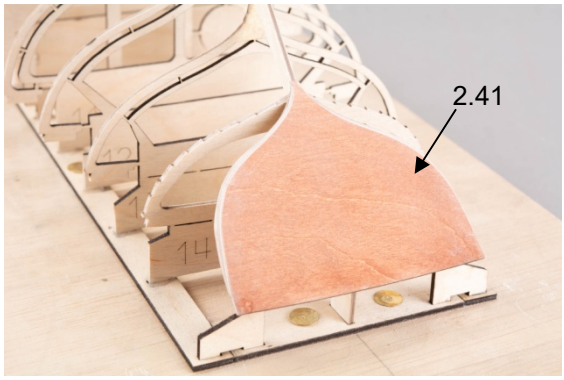


Fig.: Transom

Fig.: Beveling the transom

Next, you can start planking.
You should use glue very sparingly, as no stain will be accepted in places where glue overflows.
Before planking, it is advisable to stain the planks to give them a basic colour.
Beforehand, a brief description of the planking procedure.

This consists of the lower keel plank 0 and the following planks 1 to 15.
The clinker planking has an overlap of approx. 1 mm. The contact surface is sanded depending on the angle of support so that the planks lie flat on top of each other. (Drawing 1)
To quickly fix the planks to the bow stem, we can use superglue.
The planks have already been cut to shape and are slightly oversized towards the stern. At the stern, the planks are cut straight from plank 5 onwards (drawing 3).

For planking, we lay the planks on the bow stem for measuring. We let the planks end there at the bevelled support strip (drawing 2.4). Gluing is carried out from bow to stern. Before gluing, it is best to always tack 2 to 3 planks to the frames and stem with staples in order to plan a correct course. This also prevents you from getting the wrong plank. As a precaution, also mark the overlap of the planks in some places to ensure a smooth plank run. To be on the safe side, label the planks with the number on adhesive tape beforehand. When gluing, we work alternately on starboard and port side.

After planking, the protruding planking at the bow is sanded flat again to the 2 mm width of the stem (drawing 2.5). After the landing has been carefully sanded, the two 2 mm wide mouldings are glued in front of it. (Drawing 2.6)

We now start gluing the planks.

Plank 1 is placed in the cut-out in frame 8 and aligned with the keel. Small metal and plastic clamps from the DIY store can be used for fixing. Special clamps for planking, order no. 473770, are used here.

Until we meet the cut-outs in the outer frames with the planks, we only have frame 8 as a spacer. Drawing 1 shows the cut-outs of the corresponding frames.
The planks are cut to size, but still check by holding the following planks whether they match the notches of frames 2, 4, 8 and 14 (drawing 1). A few tenths of a mm quickly add up after 2-3 planks.
Plank 1 lies almost flat (landing) on plank 0 (drawings 4 and 5) and hardly needs to be bevelled.
The landing of the planks on the bow and stern stem can be seen in the following illustrations.


Fig.: Plank 0 and plank 1

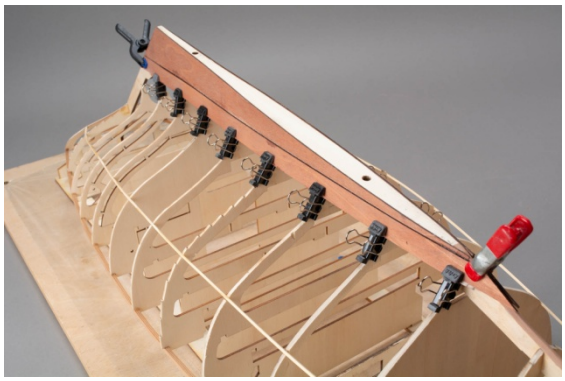


Fig.: Plank 0 and plank 1

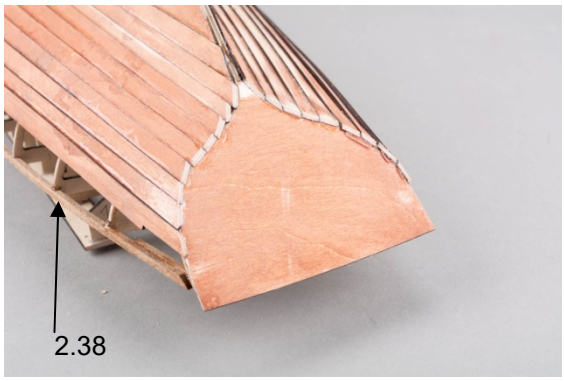


Fig.: Plank outlet at the rear

The beams 2.38 should be glued in before the final pair of planks.

Fig.: Planked hull

At the bow, sand the overhang of the planks flat to a width of approx. 2.5 mm.
Then glue on the two strips 2.23 and sand again angled from both sides (see drawing 2 steps 6 and 7).

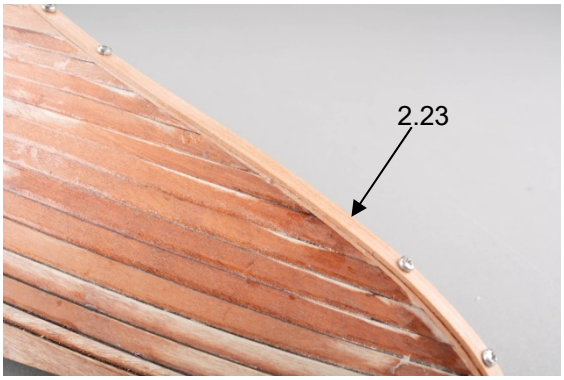


Fig.: Strips glued on

The strips can be fixed to the bow using small screws. The screw holes can later be closed with wooden dowels (e.g. toothpicks).

Fig.: Closing of the screw holes

Glue and sand the cover strip 2.22 to the stern as well.

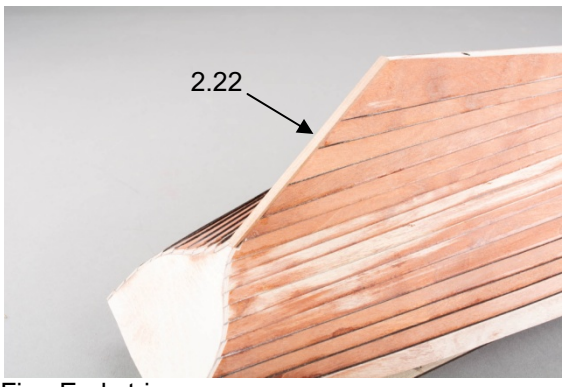


Fig.: End strip

Fig.: Front strips sanded

Once everything has been sanded, there will be light-coloured areas again, which can now be re-stained.

The next step is to install the support strips 2.39 and 2.44 for the deck and cabin walls.

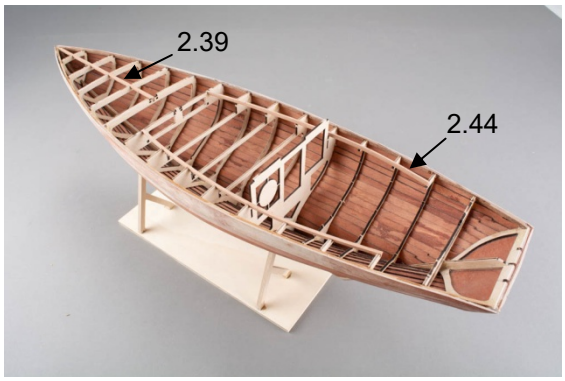


Fig.: Support strips

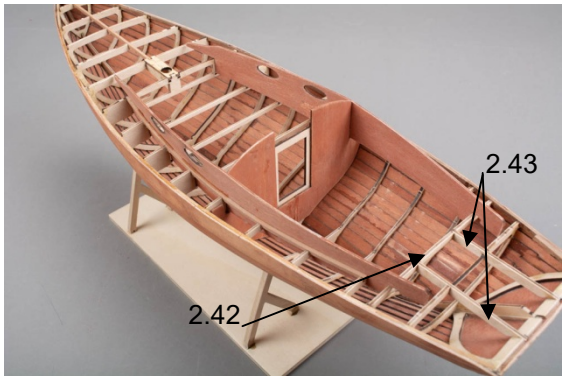


Fig.: Stern bulkhead and support

Install the rear bulkhead and the two stabilisers. Glue the stabilisers 2.43 in the transom and frame 14 (2.19). Fit and glue the lower beam 2.42.

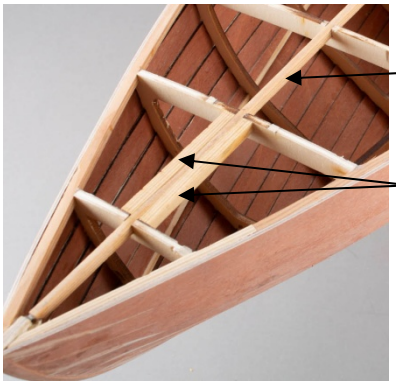


Fig.: Reinforcing the foresail fitting

Fit and glue in the two reinforcement strips 2.40.

The next step is to insert the upper mast bearing.

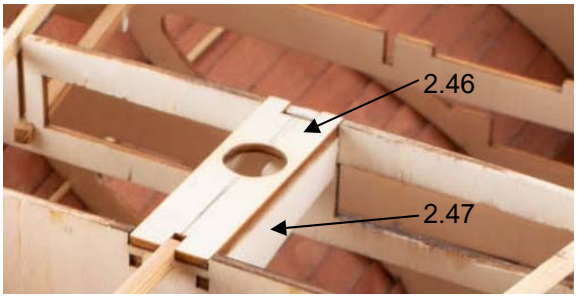


Fig.: Installing the mast bearing

Clip the two supports 2.47 into the frames and glue them in place. Glue on the mast support 2.46. Slide the mast foot 2.45 into the recesses provided at the bottom and glue it in place. A 6 mm drill or round rod can be inserted for alignment. The mast should be tilted backwards by 1° to 2°.

Stage 3, deck, superstructure and cockpit

Now fit the two superstructure side sections 3.2 as a test and lay the deck 3.1 on top. Mark the cut-out for the forestay fitting on the deck beam.

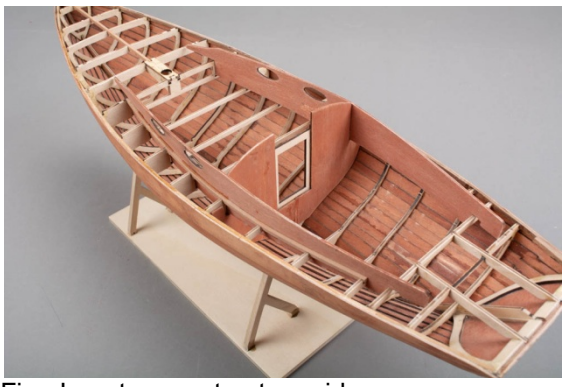


Fig.: Insert superstructure sides


Fig.: Marking the cut-out

Cut out the recess for the foresail fitting from the deck beam. To do this, drill two small holes and cut out the slot with a sharp knife.

Cut the forestay fitting 2.48 out of the etched plate and glue it into the slot. Bend the ends so that the fitting cannot be pulled out upwards.

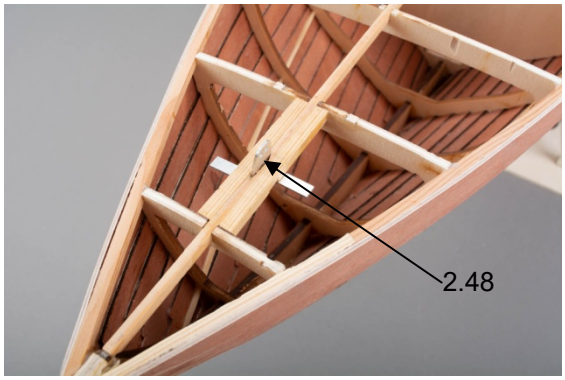


Fig.: Forestay fitting

Glue in the two sides of the superstructure 3.2.

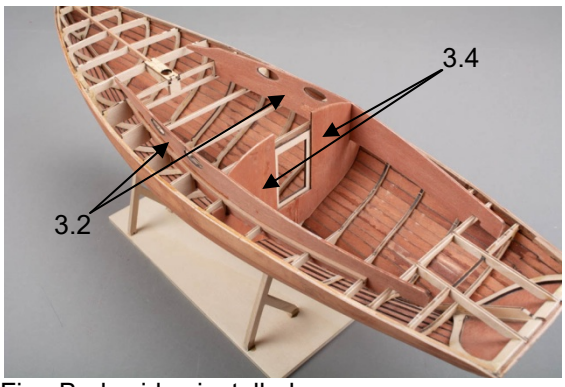


Fig.: Body sides installed

Also fit and glue in the two parts of the rear wall 3.4.

Glue together the 3 parts 3.46 for the traveller, fit them to frame 13 and glue them to the lower edge of the superstructure sides. The traveller will be completed in stage 6.

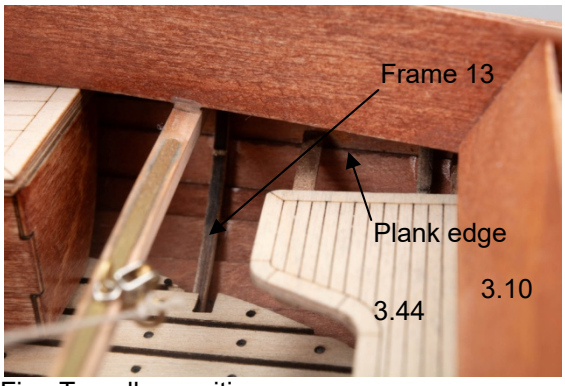


Fig.: Traveller position

Now also fit the seat bench 3.44 as shown in the illustration. To do this, glue the strips 3.45 under the seat 3.44 and fit them on the plank edge.
The deck 3.1 can then be glued on. Later, also glue in the cockpit backrest 3.10 at an angle.

Cover the transition between the deck and hull with the rubbing strake 3.37. Stain the strip if necessary and glue it to the model.


Fig.: Rubbing strake bow


Fig.: Rubbing strake bow


Fig.: Rubbing strake rear

Now attach the two bases for the winches. Sand the pine blocks 3.50 round at the front edge.

Fig.: Winch bases

Adjust the bases to the deck and cockpit edge, stain and glue on.


Fig.: Winch

Finally, the companionway door 3.9 can be fitted here.

Now fit the ballast 2.50. Sand the corrugations on the top of this 3D printed part flat. If you want the model to have a low centre of gravity, as in the original, then fill the ballast with lead balls and secure them with glue.

You can now paint the ballast and glue it on after painting the hull, or glue suitable threaded pieces into the ballast and then screw them through the keel.

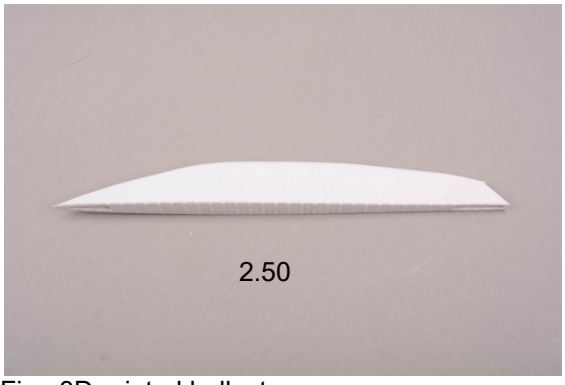


Fig.: 3D printed ballast


Fig.: Ballast on the model

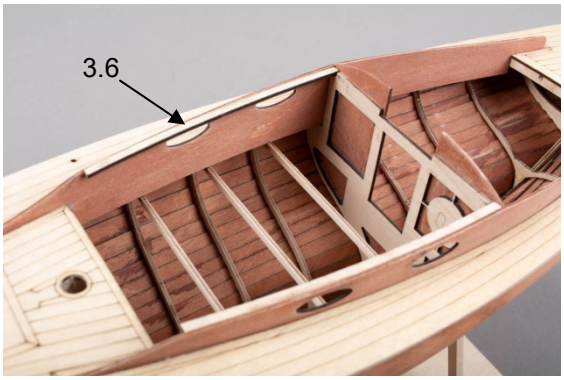


Fig.: Deck and superstructure reinforcement

Now glue in the two side wall reinforcements 3.6.

After drying, mask the reinforcements with Sellotape so that no adhesive gets onto the reinforcements when building the roof.

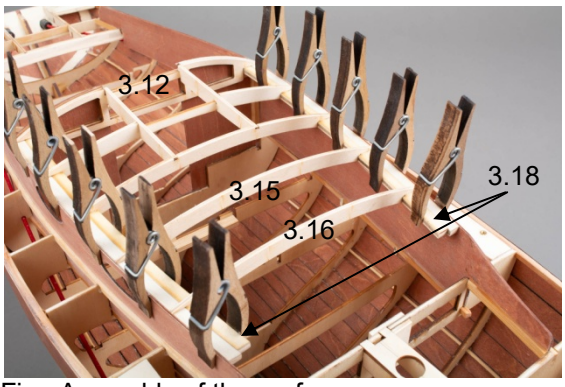


Fig.: Assembly of the roof

Clamp the two longitudinal frames 3.18 against the reinforcement strips 3.6 or fix them with adhesive tape and insert and glue the roof frames 1 to 5. Glue the two sliding hatch frames 3.19 between roof frames 1 and 3.
Do not yet glue in the foremost roof frame 3.17.

Once the roof frame has been glued together, remove it from the roof.

Place the front wall of the superstructure 3.3 on the deck edge and glue it in place at the top, tilted against the two reinforcement strips.

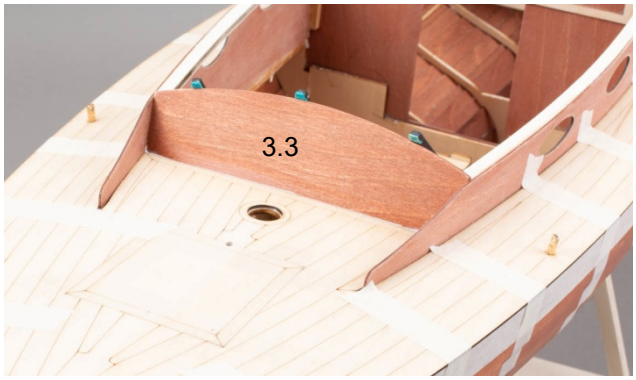


Fig.: Installing the front wall

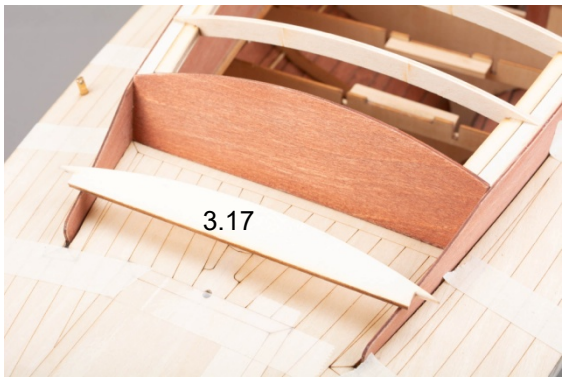


Fig.: Roof frame 6 part 3.17

Fig.: Gluing in roof frame 3.17

Apply sellotape to the inside of the front wall 3.3 so that the roof frame 3.17 cannot be glued to the front wall.

Glue the roof frame 3.17 to the reinstalled roof frame. Ensure that no adhesive gets onto the body parts.
Carefully remove the roof frame from the hull and glue on the roof 3.11.

Fig.: Roof

Make an aid from scrap wood to mark out the spacing of the handrail. Drill a 1 mm hole at a distance of 13 mm from the stop. Now draw a line parallel to the outer edge.

Fig.: Drawing the line

Insert brass pins D 1 mm (3.21) in the centre of the handrail feet. Then transfer the distances to the roof and drill. Do not glue the handrails until the roof and the handrails have been painted.

Assemble the sliding hatch from parts 3.22 to 3.26. Glue the frames 3.23 into the base 3.22. Insert the two end mouldings 3.24 and glue on the cover 3.25.

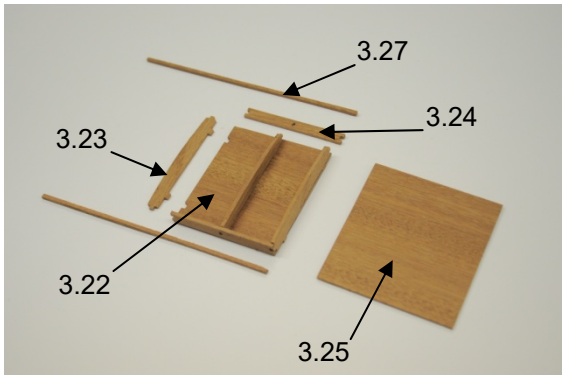


Fig.: Assembly of sliding hatch

Finally, glue on the engraved sliding hatch 3.26. Insert the finished sliding hatch into the roof and place the sliding rails 3.27 under the edge and glue them to the roof.

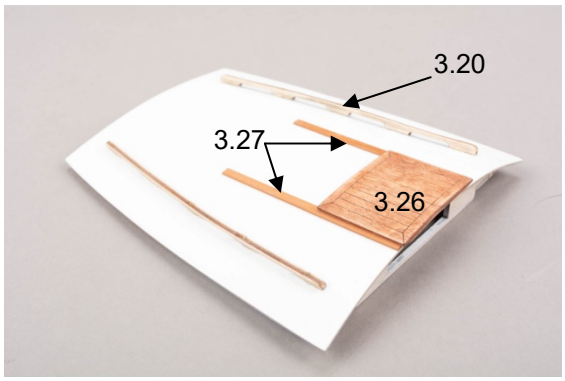


Fig.: Roof with sliding hatch and handrails

Next, make the skylight on the deck from parts 3.28 to 3.32. Sand parts 3.28 and 3.29 at an angle on the vertical joining edges so that they fit mitred on the engraved markings on the deck. Glue the cover 3.30 and crossbar 3.31 to the frame. If desired, stain the lid and the crossbar.

Glue on a piece of window glass from the inside, using a clear glue, e.g. R/C Modeller Canopy Glue, order no. 44126. Now prime the whole unit and paint it matt/silk matt. The skylight can now be glued to the deck.

Cut out the porthole 3.33 from the etched plate and glue it on.

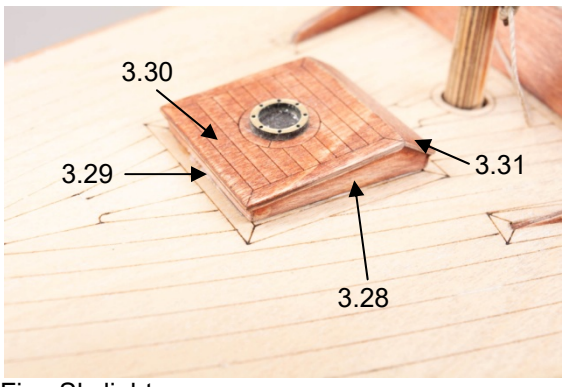


Fig.: Skylight

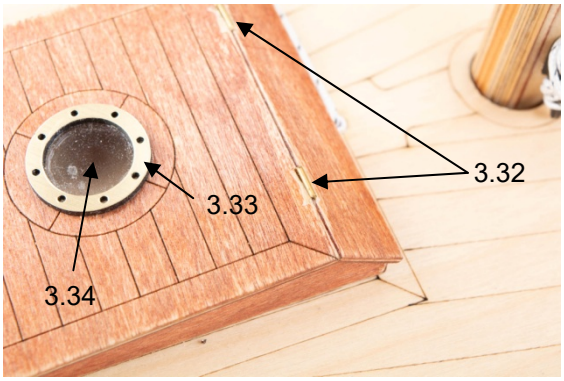


Fig.: Skylight hinge

Glue the two hinges 3.32 to the edge of the skylight.

Now the hull should be re-stained and the model painted matt or semi-gloss.

Now cut out the window frames 3.35 from the etched plate and glue them to the superstructure. Glue on the glazing 3.36 from the inside using window glue.

The cockpit floor consists of 2 parts. Do not separate the floor planks 3.38 individually, but detach them from the laser board together with the frame.

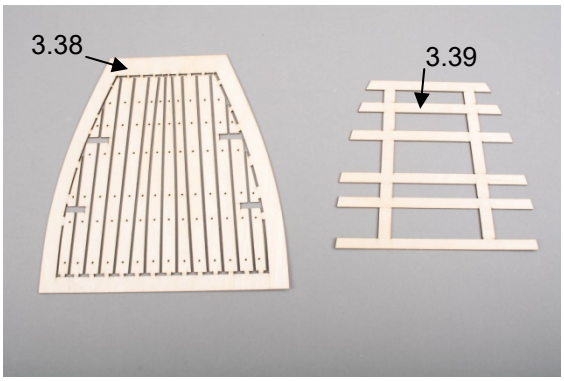


Fig.: Floor panels and subframe

Glue the bottom frame 3.39 onto the floor panels.

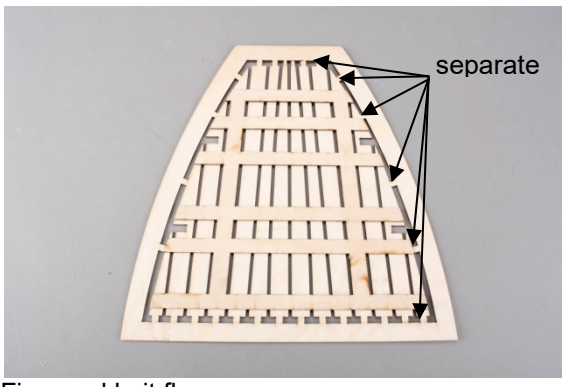


Fig.: cockkpit floor

Now separate the floor panels from the frame and sand over the edges.

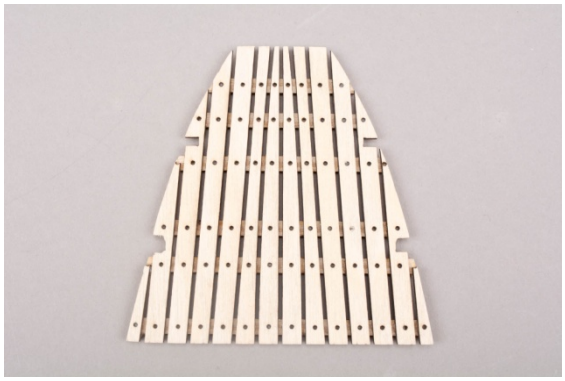


Fig.: cockkpit floor

Finally, the seats for the cockpit are made. Make sure that 2 mirrored seats are made.
Glue parts 3.40, 3.41 and 3.42 together at right angles to the seat chests. The long side parts face the superstructure wall.

Glue the seat onto the seat chests so that the long side of the chest is flush with the edge on the superstructure side.

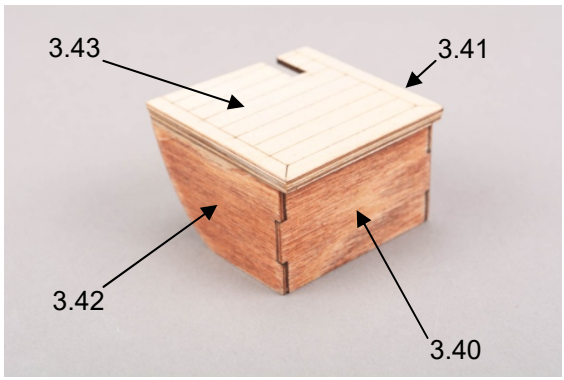


Fig.: Right-hand seat, left-hand seat build as mirror image

The seat protrudes 1.5 mm at the front.

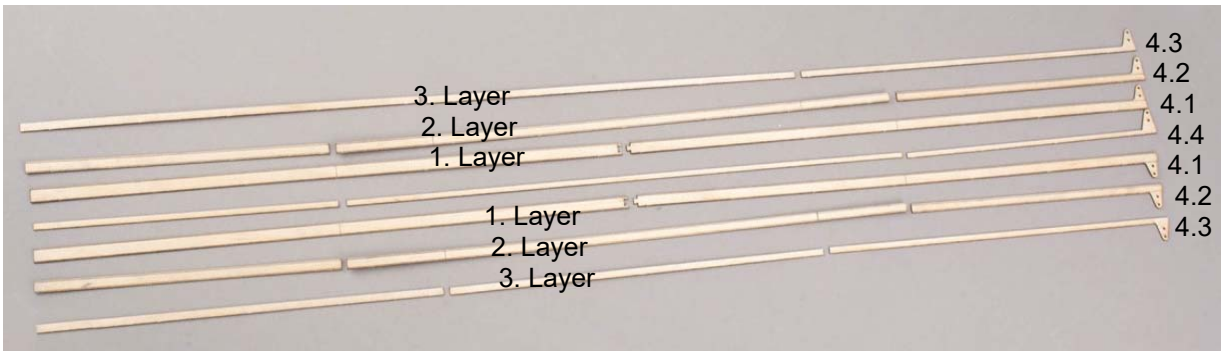


Fig.: Laser-cut mast parts 4.1 to 4.4

Stage 4, mast and main boom

The mast is made up of a total of 7 layers. We first make 2 halves of the mast, each consisting of 3 layers.
Make sure that you make 2 mirror-image halves. The first layer 4.1 consists of 2 longitudinal pieces, the second layer 4.2 of 3 and the third layer 4.3 also of 3 longitudinal pieces.
The divisions are positioned so that the joints are always offset. The first layer is glued with a dovetail joint. Thoroughly remove the black laser burn-off at the joints.
Then the parts of the 2nd layer (4.2) are glued onto the first layer within the marked line (short-long-short sequence).
This is followed by the 3rd layer (4.3), which in turn is glued to the 2nd layer within the marking.

Make sure that the individual layers are slightly conical and that you lay the right parts together without creating steps.


Fig.: 2 mast halves 4.1 to 4.3


Fig.: Masthead

Glue parts 4.4 onto one half of the mast so that the front edge is flush and the keep (slot) for inserting the mainsail is created on the rear edge.
Now glue the two halves together.
Sand the mast round and taper the thickness towards the top.

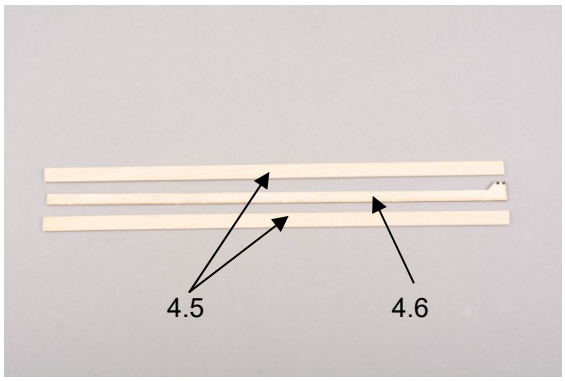


Fig.: Boom

Glue the boom together from laser part 4.6 and 2 wooden strips 4.5. The 3 parts should be flush at the bottom edge.

In the next steps, build the fittings for the rig.

First, assemble the spreaders from parts 4.7 to 4.13
Separate part 4.8 from the photoetched plate and smooth the outer edges.

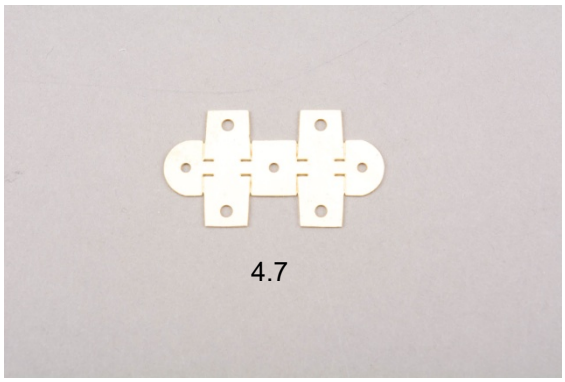


Fig.: Mast bearing

Bend these flanges upwards by 90°.

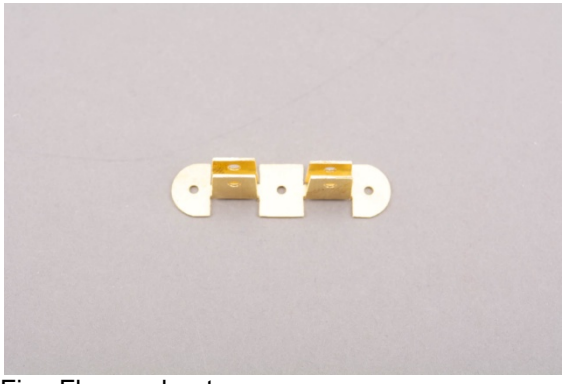


Fig.: Flanges bent over

Now bend the mast bearing 450 mm above deck around the mast.

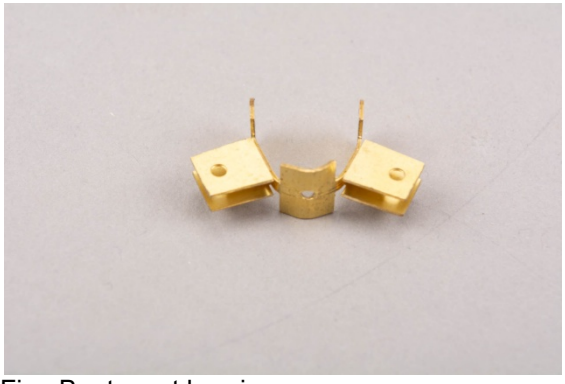


Fig.: Bent mast bearing

Grind the spreader 4.8 and screw it to the mast bearing using the screws 4.11 and nuts 4.12.

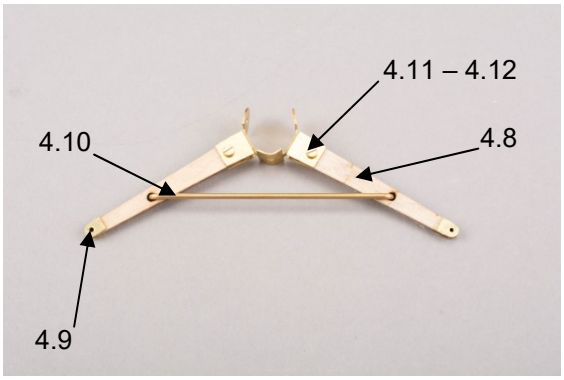


Fig.: spreader complete

Bend the brace from brass wire 4.10, push it through the holes in the spreader and glue it in place.
Glue the 4 eyes 4.9 onto the holes for the shrouds from above and below.
Screw the complete spreader to the mast later using 3 screws 4.13.

The boom fitting is made from parts 4.14 to 4.16.

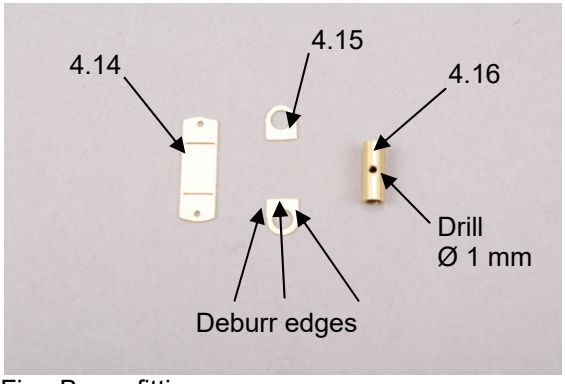


Fig.: Boom fitting

Deburr the edges of parts 4.15 so that they fit into the slot of part 4.14.

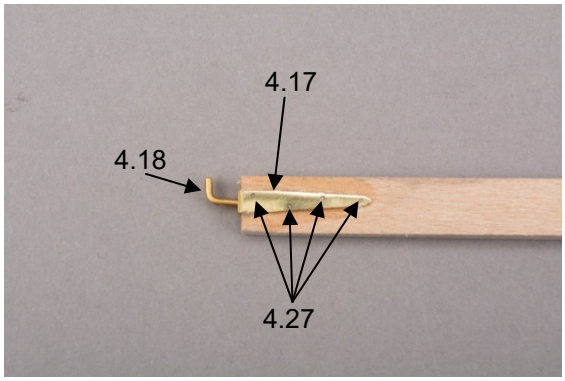


Fig.: Boom fitting

The boom fitting 4.17 is bent around the boom, glued on and can be secured with nails. The nails 4.27 must be shortened and the holes in the fitting drilled out.

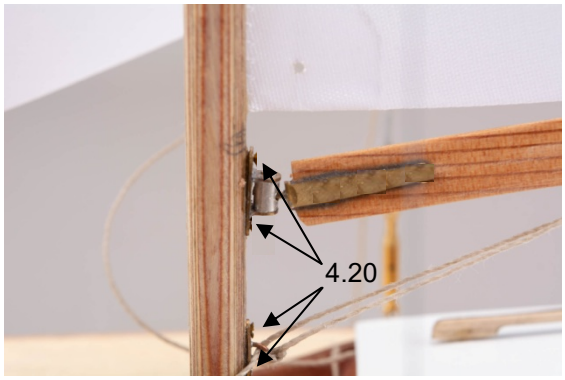


Fig.: Boom fitting installed

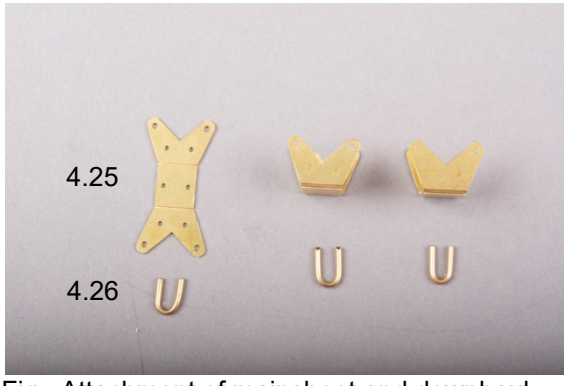


Fig.: Attachment of mainsheet and downhaul

Cut out the attachments for mainsheet 4.25 from the etched plate. Clean up the edge and bend it into a U at the bend lines.
Bend the 3 brackets from brass wire into which the blocks are hung.
The brackets are not glued into the boom until construction stage 6, when the mast is erected and the blocks will be fitted.

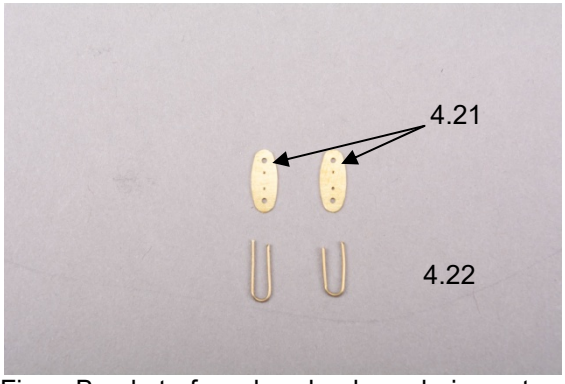


Fig.: Bracket for downhaul and jumpstay spreader

Cut out the flange plates 4.21 from the etched plate and clean them up. Bend the wire suspension brackets. As with the attachment for the mainsheet, the brackets are not glued into the mast until step 6.

Stage 5, rudder

Now make the rudder.

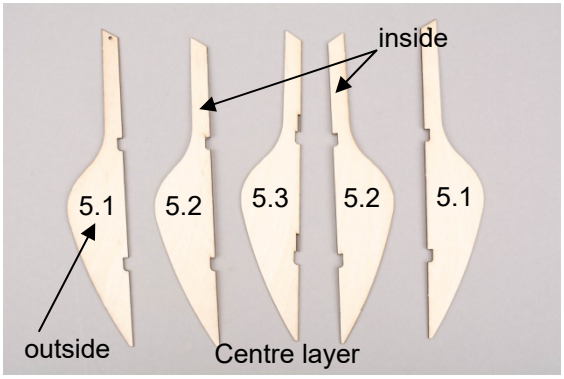


Fig.: Rudder parts

First glue the centre layer part 5.3 to the inside of a part 5.2 rudder. Once the adhesive has dried, the bearing bolts part 5.5 can be glued into the recesses.

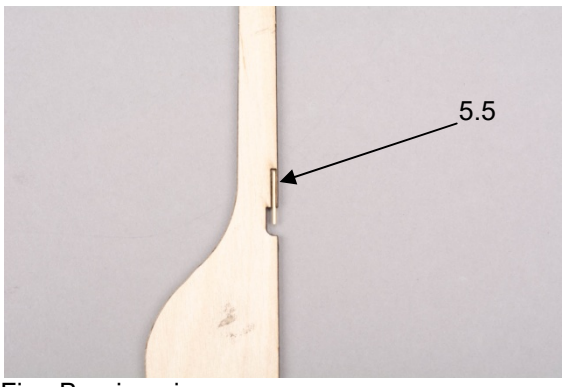


Fig.: Bearing pin

Sand down any excess adhesive after drying and glue on the 2nd part 5.2. Finally, glue on the two outer sides of the rudder blade. Then sand the rudder into profile.
After sanding, the rudder can be stained and painted.
In the next step, mark the position of the two rudder bearings 5.6 on the hull. Make sure that the rudder bearings are centred in the transom.

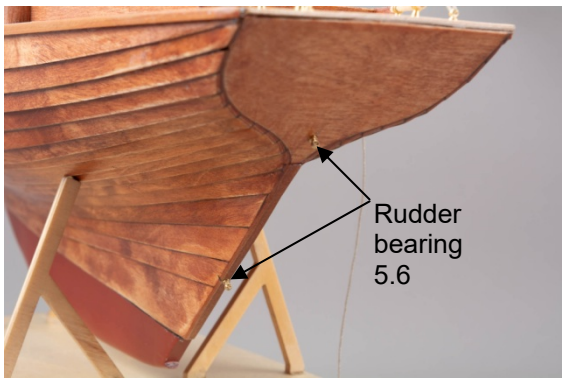


Fig.: Rudder bearing

Drill the position with 1 mm and screw the two rudder bearings 5.6 into the stem. The rudder can now be hooked in on a trial basis. If the distance is correct over the entire length of the stern, the bearings can be secured with a second adhesive.

Now glue the tiller together from parts 5.4 and sand. Fit the tiller to the recess in the rudder.
Cut out the reinforcement 5.7 from the etched plate, clean it, bend it and pin it to the rudder blade with nails 5.8.
Insert the tiller and also secure it with a pin 5.8.

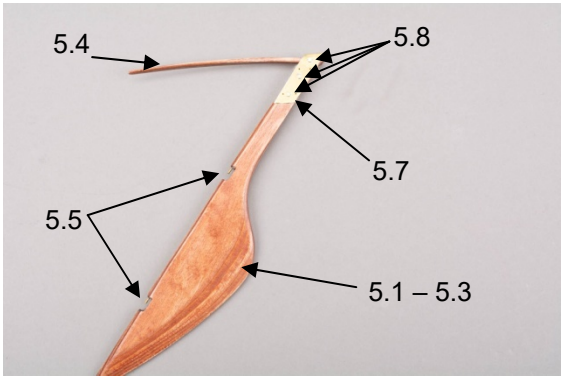


Fig.: Rudder blade with tiller

Stage 6, sails and rigging

In this stage, the sails are made and the mast is erected.

First, glue the mainsail from parts 6.1 and the foresail from parts 6.2.

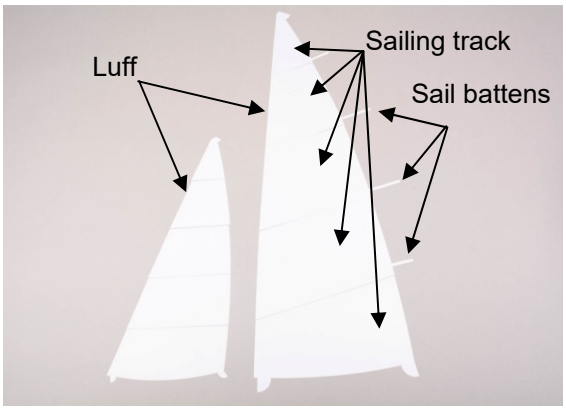


Fig.: Sail

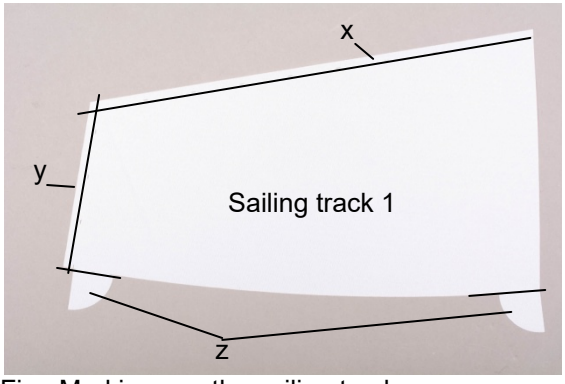


Fig.: Markings on the sailing tracks

The sail tracks are marked. First apply the double-sided adhesive tape in the "x" area only up to the markings in order to stick the individual tracks together. The adhesive tape is wider than needed here due to the production process. Cut off the excess tape with a sharp scalpel before sticking on the next track.
When all 5 tracks are joined together, the adhesive tape is attached to the luff of the mainsail "y" and the luff is folded over and glued.

Do the same with the corner reinforcements "z" and the sail battens.
For better durability, you can sew over the glued edges with a fine stitch using a sewing machine.

Attach the sailing sign 6.6 to the mainsail on the 2nd track from top.

Fig.: Sailing sign / class sign

On the foresail, the forestay is glued into the luff using 6.4 shroud rope.

Pierce small holes into the reinforced corners of the sail with a hot needle to feed through the fastening lines or, in case of the foresail, the sheet.

The mainsail can now be slid into the groove in the mast. When it is in the correct position, fix it in place with a small drop of superglue.

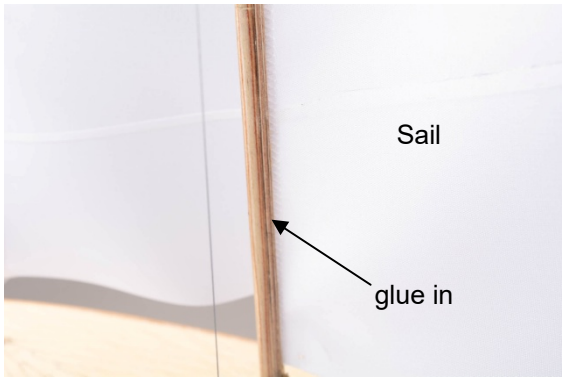


Fig.: Gluing in the sail

Attach the backstay and the jumpstay made of shroud rope 6.4 to the masthead. For the jumpstay, screw a lug 6.12 to the mast.

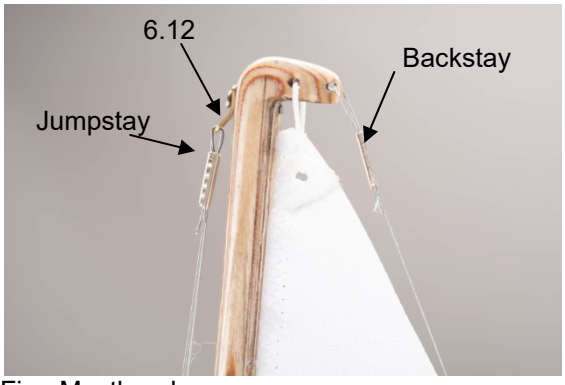


Fig.: Masthead

For the jumpstay, push the shroud through the lug and clamp it with a crimp sleeve 6.5.
Proceed in the same way for the backstay.
Attach the mainsail to the masthead with a strap.
Fasten.

To attach the backstay, screw the 2 brackets part 6.18 to the transom.


Fig.: Lugs for backstay


Fig.: Attaching the mounting brackets (shown here at the large RC model)

Attach the two brackets 46 mm apart.

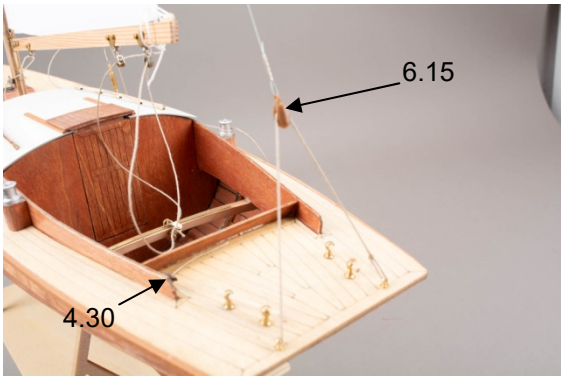


Fig.: Backstay

At the lower end, tie a block 4.28 to the end of the stay approx. 60 mm above deck. Tie a piece of sheet line 6.17 to the right-hand lug and lead it back over the block on the backstay to the 2nd lug.
Attach a cleat, part 4.30, to the inside of the cockpit frame and attach the end of the line to it. The backstay can be tensioned over this line.

Next, fit the prepared spreader (see ahead) to the mast. The dimensions are shown in drawing 5. The spreader is attached to the mast 195 mm from the top.

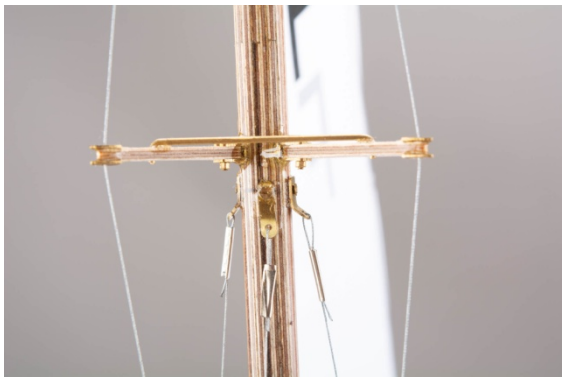


Fig.: spreader, shroud and foresail rigging


Fig.: Jumpstay

Cut 80 cm off the shroud rope 6.4. Attach one end to the lug 6.12 with a loop and crimp sleeve 6.5. Feed through the spreader.

Screw a bracket 4.21 to the mast at 380 mm from the top with 2 screws 4.24. Drill the two holes for the mounting bracket in the mast. Hook the turnbuckle 6.13 into the bracket and insert the bracket into the holes and glue it in place.

Unscrew the turnbuckle as far apart as possible. Pull the rope through the eye and on the other side through the spreader back to the masthead. Secure it there with a loop and crimp sleeve.

The jumpstay can now be tensioned using the turnbuckle.

Screw 3 brackets 4.23 underneath the spreader. 2 on the side of the mast for the shrouds and one at the front of the mast for attaching the forestay with foresail.

For the shrouds, screw the 2 eyebolts 6.7 into the holes in the deck at the points provided and secure them in place with superglue.

Fig.: Eyebolt and shroud tensioner

Bend a brass ring 6.8 into the eyebolts and hook it in with the turnbuckle 6.9. Unscrew the turnbuckle to the maximum. Attach the shroud rope to the side lug above on the mast with a loop and crimp sleeve and pull it down through the free end of the shroud turnbuckle and secure it with a loop and crimp sleeve. Tighten the turnbuckles to tension the shrouds slightly.

The next step is to attach the foresail to the mast and deck. When making the foresail, you have already glued the jib stay into the jib. Attach the jib to the top of the mast on the front lug under the spreader using a loop and crimp sleeve.

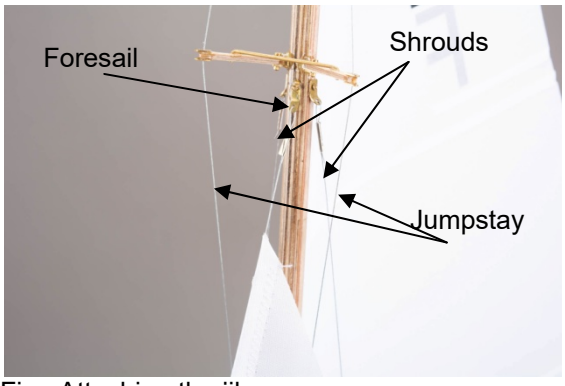


Fig.: Attaching the jib

Attach cover 2.49 to the jib fitting and glue it to the deck. Then bend a brass ring as for the shrouds and attach the turnbuckle 6.8.

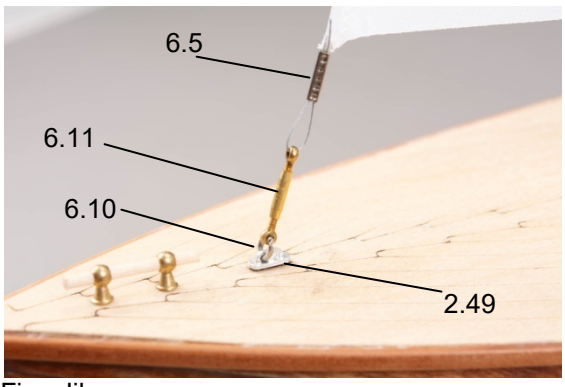


Fig.: Jib

Open the turnbuckle fully here too and attach the forestay to it. The forestay can now be tensioned with the turnbuckle.

Attach the jib sheet to the clew of the jib.

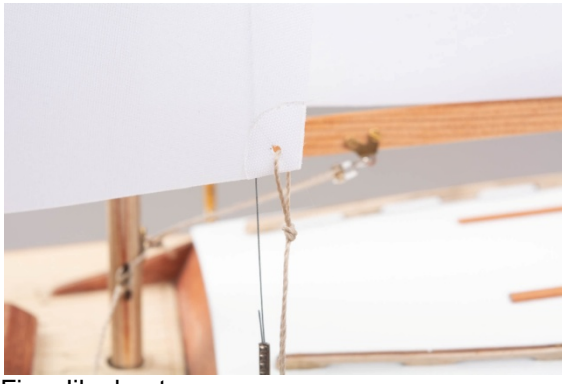


Fig.: Jib sheet

For the jib sheet guide, bend an eyebolt 6.19 out of brass wire on each side of the deck, glue it in place and hook in the block 6.20.

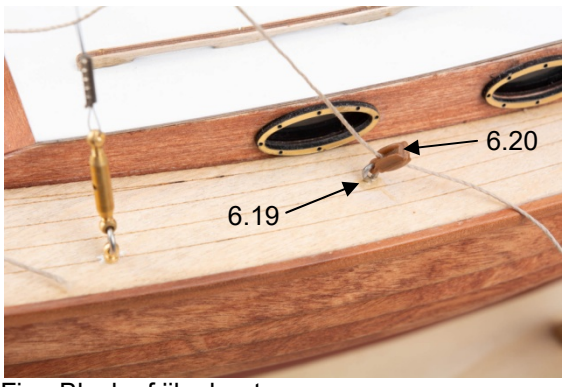


Fig.: Block of jib sheet

Guide the jib sheet through the two blocks into the cockpit.

Now you need to attach the main boom.
Screw the boom fitting to the mast.

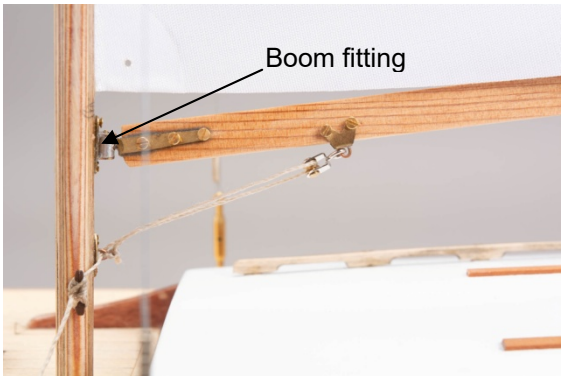


Fig.: Boom fitting

Attach the 3 terminals for the blocks for the downhaul and mainsheet to the boom.

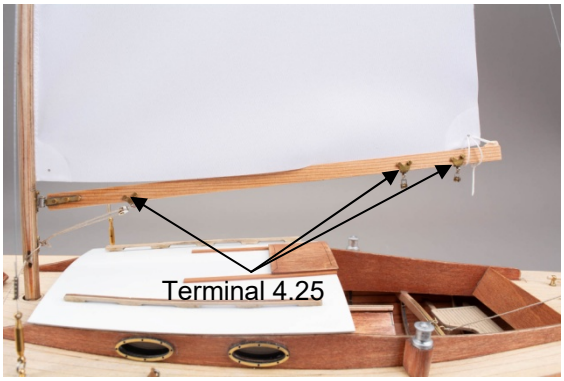


Fig.: Boom (prototype)

Glue the terminals part 4.25 to the boom and pin them with nails.
Drill the holes for the retaining brackets. Hang in the blocks 4.28 and glue the brackets into the boom. Refer to drawing 4 for the dimensions.

For the downhaul, screw the flange plate 4.21 to the mast as shown in drawing 4. Glue the bracket into the mast.

Hook the boom into the boom fitting.
Tie the mainsail to the boom at the clew.


Fig.: Mainsail clew

Now tie the downhaul to the bracket and lead it back over the block through the bracket and attach it to a cleat 4.30.

Drill a small hole for the cleat and glue the cleat into the mast. See drawing 5.

Now cut the mainsheet 6.17 to length.

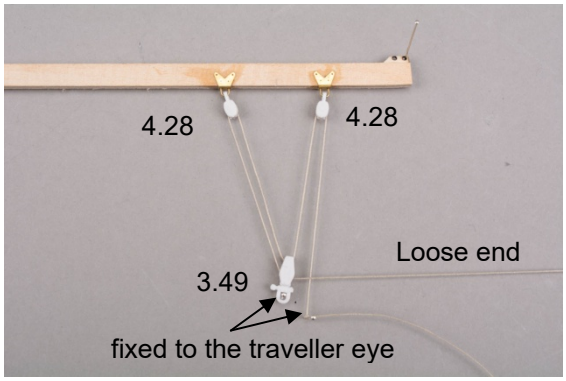


Fig.: Mainsheet

Glue the guide 3.47 onto the traveller beam. Glue block 3.49 into the centre hole using an eye bolt (brass wire).
Attach the mainsheet to the traveller eye, guide it over the rear block at the boom, down over the block on the traveller and back to the boom over the 2nd block and back through the traveller block.

Step 7, fittings

Assemble the 3 large deck cleats from the supports 7.1 and spars 7.2 and attach them to the deck.


Fig.: Bow cleat


Fig.: Stern cleats

Glue the two winches 7.3 onto the bases. Paint the winches silver.

Fig.: Winch

Finally, make the compass. The compass is missing on our prototype / decomodel.

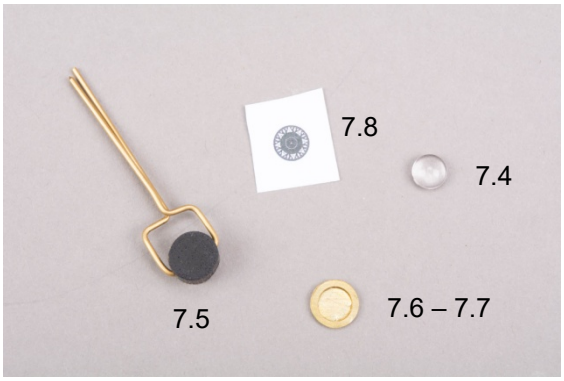


Fig.: Compass parts

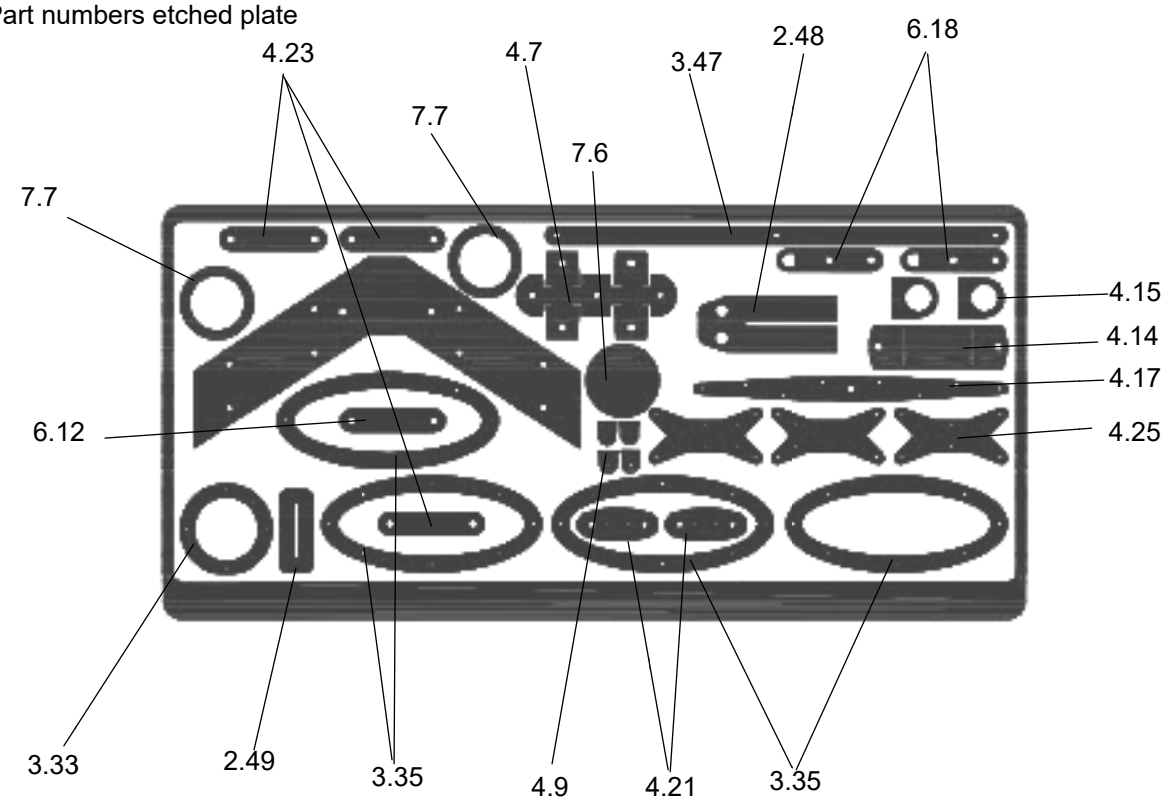
Separate the compass housing 7.5 from the laser plate and grind it. Drill a 1 mm hole crosswise. Paint the housing. Push the wire 7.9 through the hole and bend it to form the holder. Glue the etched parts 7.6 and 7.7 together and cut out and glue in the rosette.
Then glue in the compass glass with little R/C Modeller Canopy Glue, order no. 44126.

Fig.: Compass

Attach the compass to the hole in the side of the traveller.

Your Folkeboot should now be finished. We hope you enjoy it.

Part numbers etched plate



Parts list Folkeboot

No.	Description	Material mm	Dimension/Note	Qty.
Stage 1	**Stand**			
1.1	Stand plate	Plywood 5	Laser sheet 8	1
1.2	Front support	Plywood 5	Laser sheet 8	2
1.3	Rear support	Plywood 5	Laser sheet 8	2
Stage Slipway				
H1	Slipway side	Plywood 2	Laser sheet 1	2
H2	Slipway rear	Plywood 2	Laser sheet 1	1
H3	Slipway bow	Plywood 2	Laser sheet 2	1
H4	Slipway support	Plywood 2	Laser sheet 1	2
Stage 2,	**Hull**			
2.1	Keel sole	Plywood 2	Laser sheet 1	1
2.2	Bow stem	Plywood 2	Laser sheet 1	1
2.3	Stern stem	Plywood 2	Laser sheet 1	1
2.4	Keel bolt doubling front	Plywood 2	Laser sheet 1	2
2.5	Keel bolt doubling rear	Plywood 2	Laser sheet 1	2
2.6 - 2.19	Frame 1 - frame 14	Plywood 2	Laser sheet 2/3	each 1
2.20	Rear bulkhead	Plywood 2	Laser sheet 2	1
2.21	Keelboard	Plywood 2	Laser sheet 2	1
2.22	End strip	Plywood 1	Laser sheet 5	1
2.23	Bow strip	Plywood 1	Laser sheet 5	4
2.24 - 2.37	Hull plank 0 - 15	Plywood 1	Laser sheet 3/4	each 2
2.38	Beams	Pine	3 x 2 x 540	2
2.39	Deck support	Pine	3 x 2 x 210	1
2.40	Reinforcement strip	Pine	3 x 2 x 35	2

2.41	Transom	Plywood 2	Laser sheet 1	1
No.	Description	Material mm	Dimension/Note	Qty.
2.42	Cockpit rear frame	Plywood 2	Laser sheet 1	1
2.43	Support	Plywood 2	Laser sheet 1	2
2.44	Support cabin/cockpit	Pine	3*2*320	2
2.45	Mastfoot	Plywood 2	Laser sheet 1	1
2.46	Mastbearing	Plywood 2	Laser sheet 1	1
2.47	Support	Plywood 2	Laser sheet 1	2
2.48	Fitting forestay	Brass	Edged sheet	1
2.49	Cover	Brass	Edged sheet	1
2.50	Ballast keel	Plastic	3 D print	1
Stage 3 Deck, superstructure and Cockpit				
3.1	Deck	Plywood 1,5	Laser sheet 6	1
3.2	Superstructure side	Plywood 1,5	Laser sheet 6	2
3.3	Superstructure front	Plywood 1,5	Laser sheet 6	1
3.4	Superstructure rear wall halves	Plywood 1,5	Laser sheet 7	2
3.6	Reinforcement side wall	Plywood 2	Laser sheet 2	2
3.9	Companionway door	Plywood 1,5	Laser sheet 4	1
3.10	Cockpit backrest	Plywood 1,5	Laser sheet 4	1
3.11	Roof	Plywood 1	Laser sheet 5	1
3.12 - 3.17	Roof frame 1 - Roof frame 6	Plywood 2	Laser sheet 1+2	je 1
3.18	Longitudinal frame	Plywood 2	Laser sheet 1	2
3.19	Sliding hatch frame	Plywood 2	Laser sheet 2	2
3.20	Handrail	Plywood 2	Laser sheet 2	2
3.21	Pins	Brass wire	D1 x 10	10
3.22	Sliding hatch bottom	Plywood 1	Laser sheet 4	1
3.23	Sliding hatch frames	Plywood 1	Laser sheet 4	3
3.24	Sliding hatch end	Plywood 1	Laser sheet 4	2
3.25	Sliding hatch cover	Plywood 1	Laser sheet 4	1
3.26	Sliding hatch engraved	Plywood 1	Laser sheet 4	1
3.27	Slide rails	Wood strip	3 x 1 x 70	2
3.28	Skylight side	Plywood 1,5	Laser sheet 6	2
3.29	Skylight cross	Plywood 1,5	Laser sheet 6	2
3.30	Skylight cover	Plywood 1,5	Laser sheet 6	1
3.31	Skylight transom	Plywood 1,5	Laser sheet 6	1
3.32	Hinge	Brass wire	D 1 x 5 mm	2
3.33	Porthole	Brass	Edged sheet	1
3.34	Glazing porthole	Vivak	10 x 15	1
3.35	Window frames	Brass	Edged sheet	4
3.36	Glazing windows	Vivak	15 x 80	2
3.37	Rubbing strake	Strip	3 x 2 x 550	2
3.38	Cockpit floor	Plywood 1,5	Laser sheet 7	1
3.39	Lower frame	Plywood 1,5	Laser sheet 6	1
3.40	Side seat front	Plywood 1,5	Laser sheet 6	2
3.41	Side seat left	Plywood 1,5	Laser sheet 6	2
3.42	Side seat right	Plywood 1,5	Laser sheet 6	2
3.43	Side seat plate	Plywood 1,5	Laser sheet 6	2
3.44	Seat bench	Plywood 1,5	Laser sheet 6	1

3.45	Support	Strip	3 x 2 x * 115	2
3.46	Traveller	Plywood 1,5	Laser sheet 6	3
No.	Description	Material mm	Dimension/Note	Qty.
3.47	Guidance	Brass	Edged sheet	1
3.48	Eyelet traveller	Brass wire	D1 x 25	1
3.49	Traveller block	3 D print	12 mm	1
3.50	Base Winsch	Strip	10 x 10 x 13	2
Stage 4, Mast and Boom				
4.1 - 4.3	Mast layer 1 - 3	Plywood 1	Laser sheet 5	each 2
4.4	Centre layer mast	Plywood 1	Laser sheet 5	1
4.5	Main boom	Strip	1,5 x 8 x 230	2
4.6	Centre layer boom	Plywood 1	Laser sheet 5	1
4.7	Mast bearing spreader	Brass	Edged sheet	1
4.8	Spreader	Plywood 2	Laser sheet 1	2
4.9	Eye spreader	Brass	Edged sheet	4
4.10	Bar spreader	Brass wire	D1 x 40	1
4.11	Screw spreader	Metal	M1 x 6	2
4.12	Nut spreader	Metal	M 1	2
4.13	Screw	Wood screw	D1 x 8	3
4.14	Flange boom fitting	Brass	Edged sheet	1
4.15	Bearing boom fitting	Brass	Edged sheet	2
4.16	Joint boom fitting	Rohr	D3 x d2 x 6	1
4.17	Boom fitting	Brass	Edged sheet	1
4.18	Joint hook	Brass wire	D1 x 15	1
4.19	Nails	Ready made	0,7 x 8	12
4.20	Screw	Wood screw	D1 x 8	4
4.21	Flange plates	Brass	Edged sheet	2
4.22	Bracket	Brass wire	D1 x 25	2
4.23	Lug under spreader	Brass	Edged sheet	3
4.24	Screw	Wood screw	D1 x 8	10
4.25	Terminal mainsheet/downhaul	Brass	Edged sheet	3
4.26	Bracket	Brass wire	D1 x 25	3
4.27	Nails	Ready made	0,7 x 8	16
4.28	Block boom	3 D print	5 mm	2
4.29	Block downhaul	3 D print	5 mm	1
4.30	Cleat	Ready made	L 9 mm	3
Stage 5, Ruder				
5.1	Rudder outside	Plywood 1	Laser sheet 4	2
5.2	Rudder inside	Plywood 1	Laser sheet 4	2
5.3	Rudder centre	Plywood 1	Laser sheet 4	1
5.4	Tiller	Plywood 2	Laser sheet 2	2
5.5	Bearing pin	Brass wire	D1 x 15	2
5.6	Rudder bearing	Eybolt	M 1,4	2
5.7	Reinforcement	Brass	Edged sheet	1
5.8	Nails	Ready made	0,7 x 8 mm	10
Stage 6, Sail and rigging				
6.1	Main sail 5-piece	Cloth	Laser cut	1
6.2	Fore sail 5-piece	Cloth	Laser cut	1

6.3	Double-sided adhesive tape		6 x 2500	1
6.4	Shroud rope stainless steel	Ready made	D 0,3 x 3000	1
6.5	Crimp sleeve brass	Ready made	d 1,2 x 6	10
No.	Description	Material mm	Dimension/Note	Qty.
6.6	Sailing sign	Cloth	Laser cut	2
6.7	Eyebolt shrouds	Ready made	D 1,4 x 12	2
6.8	Brass ring shrouds	Brass wire	D1 bend	2
6.9	Turnbuckle	Ready made	M2 x 12	2
6.10	Brass ring Forestay	Brass wire	D1 bend	1
6.11	Turnbuckle Forestay	Ready made	M1,4 x 9	1
6.12	Lug jumpstay mast top	Brass	Edged sheet	1
6.13	Turnbuckle jumpstay	Ready made	M1,4 x 9	1
6.15	Block Backstay	3 D print	5 mm	1
6.17	Sheet line, tethers	Yarn	0,5 x 2500	1
6.18	Lug Backstay	Brass	Edged sheet	2
6.19	Eyelet fore sheet block	Brass wire	D1 x 20	2
6.20	Block fore sheet	3 D print	5 mm	2
Stage 7, Fittings				
7.1	Cleat	Ready made	H6 x d2	6
7.2	Spar cleat	Wood	D2 x 22	3
7.3	Winch	3 D print	D8 x 9	2
7.4	Compass glass	Ready made		
7.5	Compass housing	Plywood 5	Laser sheet 8	1
7.6	Compass plate	Brass	Edged sheet	1
7.7	Compass frame	Brass	Edged sheet	2

Compass rosette to cut out