

# Launch Dolly

Building Instructions DOLLY launch  
No. ro1005



The illustration shows the different variants of how to build the Dolly with optional accessories.



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### Specification:

Length: .....	550 mm
Beam: .....	165 mm
Displacement: .....	approx. 1200g
Scale: .....	1:20

Additional accessories are required for the construction and operation.  
For details, recommended adhesives and colors, please refer to the separate sheet with accessories.

## Additions to the kit Dolly

### Fitting set

**Order no. ro1006**

For true -scale appearance of the model. It contains the fitting parts such as bollards, rescue ring, flag with flag stick, fan, horn and the complete lamps with pebbles. TParts from the fitting set are marked „BS“ in the parts list.

For the power supply of the functional lighting are required:

Quantity	Description	order no.
1	Flex cable, 2x 0,07 mm	ro4035
1	BEC cable female (2 pcs)	67522
1	Shrink tube / tape	---

If the lighting is to be switched via the remote control, additional part are required:

1	RC switch Duo-Switch	67202
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### Special Funktion Set Fire monitor Order no. ro1009

The launch Dolly can be covered into a fire-fighting launch by installing the special functions set. The special function set fire-monitor can be changed after the model has been completed. However, painting work is easier to carry out during assembly. Contents: operating fire monitor, pump, connecting hardware.

For the RC control of the pump are required:

Quantity	Description	order no.
1	RC Uno Switch	67201
1	BEC Plug with cable (Set)	67522

Optionally, a standard servo is required when the Fire monitor should be adjusted in height.

### Towing Gear

**Order no. ro1434**

The launch can be converted into a towing wessel by fitting the towing gear. A load of up to about 15 kg. can be towed. The towed gear can still be assembled after the construction of the model.

### Recommended radio control system

All remote control systems from 2 channels in combination with a servo and electronic speed controller. When installing special functions, 4-channel remote control is recommended.

### Tools

Balsa knife, scissors, hand drill with drills, soldering irons with accessories, files, sandpaper, screwdriver, hex wrench, forceps, brush, black felt tip pen, clothes pegs, tape.

For further tools and informations, see the Krick Modelltechnik main catalog.

A detailed list of accessories for the kit and the expansion kits can be found in the accessory list enclosed with the kit.

### Dear customer,

Congratulations on your choice of model ship of the brand ROMARIN from the company Krick Modelltechnik. Many thanks for placing your trust in us.

### Introduction to the building instructions

Our model of the Dolly launch is a classic kit - not a ready-made model.

We therefore assume that the builder has a certain amount of experience in the handling of modelling tools and materials.

For this reason these instructions do not explain in detail the procedure for separating laser-cut parts, drilling holes, cutting strip material and wire to length, painting individual components, etc.

The building instructions are divided into sub-assemblies, each of which is sub-divided into individual stages arranged in a logical sequence.

Each stage also includes supplementary hints and tips which apply to the procedures currently in hand.

Before you start construction, please read right through the instructions, referring constantly to the illustrations, so that you have a clear idea how the model goes together.

In basic terms the part numbers in the drawings and instructions reflect the recommended sequence of assembly.

Unless indicated otherwise, all measurements are stated in millimetres.

**All stated directions are as seen from the rear of the model looking forward.**

## General notes on the building instructions

### The vacuum-moulded parts

Use abrasive paper to sand the cut edges smooth after trimming the vacuum-moulded parts.  
Drill holes in the vacuum-moulded parts at the marked points, and in the positions indicated in the illustrations.

### The parts in the laser-cut sheets

This kit contains laser-cut sheets containing model components.  
The parts are joined to the sheets by small lugs, to prevent them falling out in transit. They can easily be removed using a chisel or a sharp balsa-knife.  
It is best to leave the parts in the sheets until you need them for the stage in hand; this makes it easier to identify the remaining parts.  
These instructions include an A4 sheet showing reduced scale drawings of the laser-cut sheets and the stage numbers for which they are needed.  
The individual sub-assemblies from each stage should be trial-fitted "dry" (no glue) beforehand, both to check that the parts are correctly positioned, and that they fit together neatly.  
As most of the curved shapes require fine adjustment, the projecting tongues are designed to have a little play in the matching slots. This is useful when completing complex sub-assemblies, but does mean that you have to be very accurate when aligning external contours.  
This method of construction inevitably leaves small gaps; these can be used to tack the parts together with small quantities of cyano.  
When joining parts at an angle to each other, it is important to ensure that their contact surfaces mate accurately, as errors are cumulative, and the result may be that it is difficult to install subsequent sub-assemblies in the correct position.  
The sequential numbering of the stages of assembly is intended to help you when installing the parts. This is not always 100% true, but still forms a useful guideline.  
Wait until glued joints have set hard before filling exposed joints and sanding smooth.

### Glued joints

Use the recommended adhesives only.  
Always observe the instructions provided by the adhesive manufacturers.  
All parts must be trial-fitted "dry" (without glue) before you reach for the adhesive.  
When using a Acrylit glue, spread the adhesive out thinly rather than applying thick beads of glue.  
All glued joints involving the hull at which there is a danger of water penetration (rudder bush, stern tube etc.) must be sealed carefully with a fillet of the Acrylit glue.  
Hold parts together with clamps or strips of adhesive tape after applying the glue.  
Small quantities of cyano-acrylate can be applied using a pin or a length of thin wire.

### Soldering

When soldering always use a hot iron and apply it for the minimum of time, otherwise there is a danger of heat-damage to the adjacent plastic parts (superstructure, platforms etc.). An alternative method is to prepare a simple jig for bending and

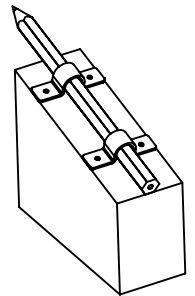
soldering the individual railing sections.  
Clean up all soldered joints carefully. All metal parts must be rubbed down with fine abrasive paper and de-greased before they are painted. Use heat-shrink sleeves to insulate soldered joints involving connectors and cables.

### Painting the model

Any gaps between individual plastic parts can be made good using a plastic filler paste, e.g. DELUXE Plastic putty. Sand filled areas smooth when dry.  
When plastic parts are to be painted, clean the surfaces with white spirit (not cellulose thinners), and then avoid touching them again. Before painting the hull we recommend giving it a coat of primer and rubbing down with fine abrasive paper. If you wish to obtain a neatly delineated paint job, it is essential to paint areas of different colour separately. This means: every individual component which is to be a different colour should first be trimmed to fit on the boat, then painted, and only then glued or screwed to the model.  
If any part is to be painted in multiple colours, then the different areas should be masked out using Tesafilm (clear adhesive tape) or PVC tape - don't use paper masking tape. The tape must be removed again when the new paint is just dry to the touch.  
Where painted parts are to be glued to the model, sand the painted surface before applying glue.  
For painting this model we recommend acrylic-based or synthetic enamel paints exclusively.  
If you wish, you can finish the model in the colour scheme shown in the kit box illustrations.

### Marking the waterline, painting the model

Since the Construction Water Line (CWL) also represents the dividing line between the upper hull and the lower hull colours, it must be marked on the hull before painting.  
It is best to prepare the jig shown in the drawing for marking the waterline. The position of the waterline is stated in the drawing.  
Place the hull in the boatstand and weight it down to prevent it shifting.  
Now pack up the boatstand so that the CWL points marked at the bow and stern are the same height above the bench; it is best to check this with a steel ruler. Set the jig to the correct height, and move it round the hull to mark the waterline all round.



### Radio control system

A two-channel radio control system is all you need to operate the model.  
We recommend that you install the specified RC components. Study the instructions supplied with the equipment before using it for the first time.  
Electrical connections must be secured inside the hull in such a way that they cannot come into contact with any water which penetrates the model.

## Parts list kit Dolly

Part No.	Description	Material	fSize in mm	Qty	Notes
<b>Stage 0 Boatstand</b>					
0.1	Bow support	Wood	3,0 laser-cut part	1	
0.2	Side support	Wood	3,0 laser-cut part	2	
0.3	Stern support	Wood	3,0 laser-cut part	1	
<b>Stage 1 Hull / Motor installation</b>					
1.1	Hull	ABS	vacuum-moulded part	1	Drill holes
1.2	Base plate	ABS	1,5 laser-cut part	1	
1.3	Motor bulkhead	ABS	1,5 laser-cut part	1	
1.4	Gusset	ABS	1,5 laser-cut part	2	
"S"	Angle template	ABS	1,5 laser-cut part	1	
1.5	Drive shaft	Steel	Ø2x160	1	Shorten
1.6	Hexagon nut	Brass	M 2	1	
1.7	Boat propeller	Plastic	Gussteil	1	
1.8	Stern tube	Brass	Ø4x 80	1	
1.9	Collet	Brass	Ø2x7x5	1	
1.10	Grub screw	Steel	M3x3	1	
1.11	Shaft cuppling	Rubber	Ø5x1x20	1	
1.12	Screw	Steel	M2,5x6	2	Suitable for Max Speed 400
1.13	Washer	Steel	Ø2,5	2	Suitable for Max Speed 400
E-Motor	Electric motor	Ready made part	Ø30x37,5	1	Not included
	Suppressor	Set		1	Not included
	Motor lead	Cable	10 cm, 1,5 mm <sup>2</sup>	2	Not included
	Connectors motor	Connectors	4 mm round	2	Not included
<b>Stage 2 Rudder and linkage</b>					
2.1	Rudder plate	ABS	1,5 laser-cut part	1	
2.2	Rudder support plate	ABS	1,5 laser-cut part	1	
2.3	Rudder bush	Brass	Ø4x30	1	
2.4	Rudder and shaft	Plastic / brass	37x50	1	Overlength
2.5	Washer	Brass	3,2x7x0,5	1	
2.6	O-Ring	Rubber	2,7x1,5	1	
2.7	Washer	Brass	3,2x7x0,5	1	
2.8	Collet	Metal	Ø3x7x5	1	
2.9	Bellcrank	Plastic	30 /30	1	Overlength
2.10	Socket-head screw	Steel	M3x10	1	
2.11	Double-sided adhesive tape		20x40 mm	3	
2.12	Servo	Ready made part	20x40	1	Not enclosed
2.13	Z-pushrod	Steel	1,5	2	
2.14	Collet	Metal	Ø3x7x5	1	
2.15	Socket-head screw	Steel	M3x10	1	
<b>Stage 3 Deck</b>					
3.1	Deck	ABS	1,5 laser-cut part	1	
3.2	L-Profil	ABS	3,5x9	2	Shorten
3.3	L-Profil	ABS	3,5x9	1	Shorten
3.4	L-Profil	ABS	3,5x9	1	Shorten
3.5	Dummy hatch	ABS	1,5 laser-cut part	2	
3.6	Hatch cover	ABS	1,5 laser-cut part	1	
3.7	Latch	Brass	Ø 1,5	2	Shorten, bend to shape
3.8	Cruciform bollard	Plastic	12x8	1	BS, make from 1x3.9
3.9	Double cruciform bollard	Plastic	24x8	2	BS
3.10	Flag stick with holder	Plastic/brass	ready made part	1	BS
3.11	Flag and line	Tissue	ready made part	1	BS

Part No. ---- Description -----Material -----Size in mm -----Quantity---- Notes

## Stage 4 Internal fittings

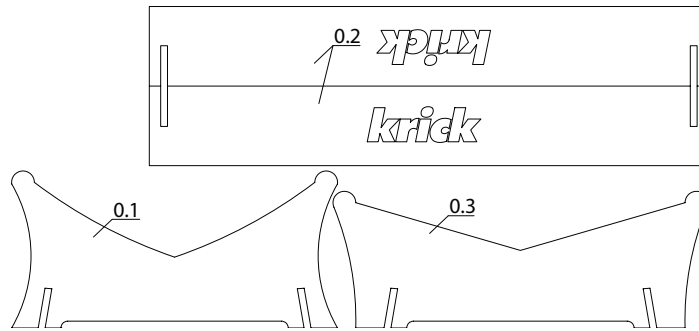
4.1	Boe wall	ABS	1.5 laser-cut part	1	
4.2	Side control stand	ABS	1,5 laser-cut part	2	
4.3	Steering wheel plate	ABS	1,5 laser-cut part	1	
4.4	Control stand cover	ABS	1,5 laser-cut part	1	
4.5	Driving stand stop-piece	ABS	1,5 laser-cut part	1	
4.6	Base plate	ABS	1,5 laser-cut part	1	
4.6a	Cabin deck	Wood	1 laser sheet	1	
4.7	Stern wall	ABS	1,5 laser-cut part	1	
4.8	Side wall	ABS	1,5 laser-cut part	2	
4.9	Support	ABS	Vierkant 3x3	2	Shorten
4.10	Engine room cover	ABS	1,5 laser-cut part	1	
4.11	Engine room rear wall	ABS	1,5 laser-cut part	1	
4.12	Engine room side wall	ABS	1,5 laser-cut part	2	
4.13	Companionway string	ABS	1,5 laser-cut part	4	
4.14	Companionway step	ABS	1,5 laser-cut part	4	
4.15	Railing stanchion	ABS	1,5 laser-cut part	6	
4.16	Handrail	Brass	Ø 0,8	4	Shorten
4.17	Handrail	Brass	Ø 1	1	Shorten, bend to shape
4.18	Ventilator	Plastic	16x27,5	2	BS
4.19	Chain	Brass	100 lg.	1	BS shorten
4.20	Lifebelt	Plastic	Ø 25	1	BS
4.21	Steering wheel	Plastic	Ø 40	1	BS
4.22	Self-tapping screw	Steel	2,2x9,5	1	
4.23	Sticker Control Stand	Foil	ready made part	1	

## Stage 5 Wheelhouse

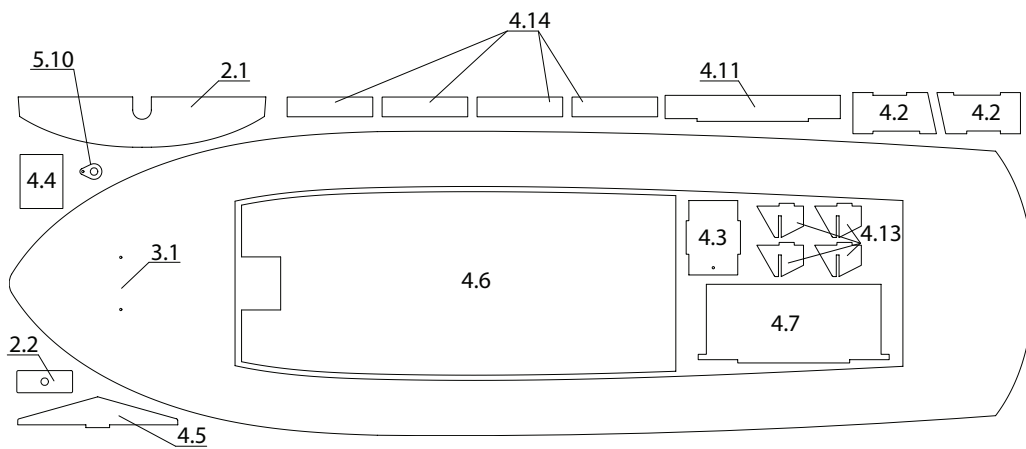
5.1	Wheelhouse	Plastic, clear	vacuum-moulded part	1	Ausschneiden
5.2	Roof	ABS	vacuum-moulded part	1	Drill holes
5.3	Lamp bracket, left	Brass	10x30	1	BS
5.4	Lamp bracket, right	Brass	10x30	1	BS
5.5	Mini-blup, green	Glass	6V/50mA	1	BS
5.6	Mini-blup, red	Glass	6V/50mA	1	BS
5.7/5.11/5.16	Mini-blup, clear	Glass	6V/50mA	3	BS
5.8 /5.12	Lamp housing	Brass	Ø7x9,5	4	BS
5.9	Lamp support rod	Brass	Ø1,5x55	1	shorten
5.10	Lamp platform	ABS	1,5 laser-cut part	1	BS
5.13	Handrail	Brass	Ø1,5	2	shorten, bend to shape
5.14	Searchlight bar	Plastic	für Ø15	1	BS
5.15	Searchlight housing	Plastic	Ø15	1	BS
5.17	Searchlight lens	Plastic	Ø13	1	BS
5.18	Foghorn	Plastic	23,5	1	BS



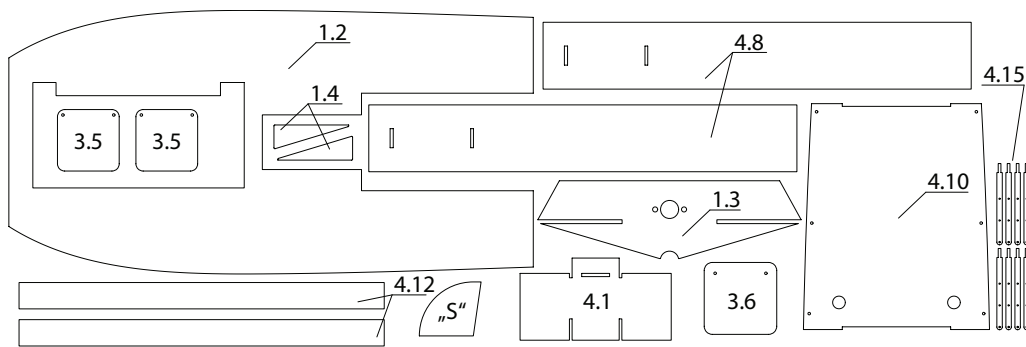
## Laser sheet launch Dolly



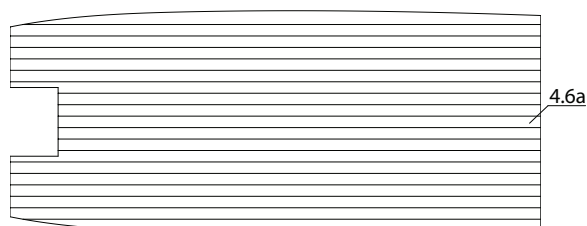
**Lasersheet Bootstand Wood 3 mm**



**Lasersheet Deck ABS 1,5 mm**



**Lasersheet Superstructure ABS 1,5 mm**



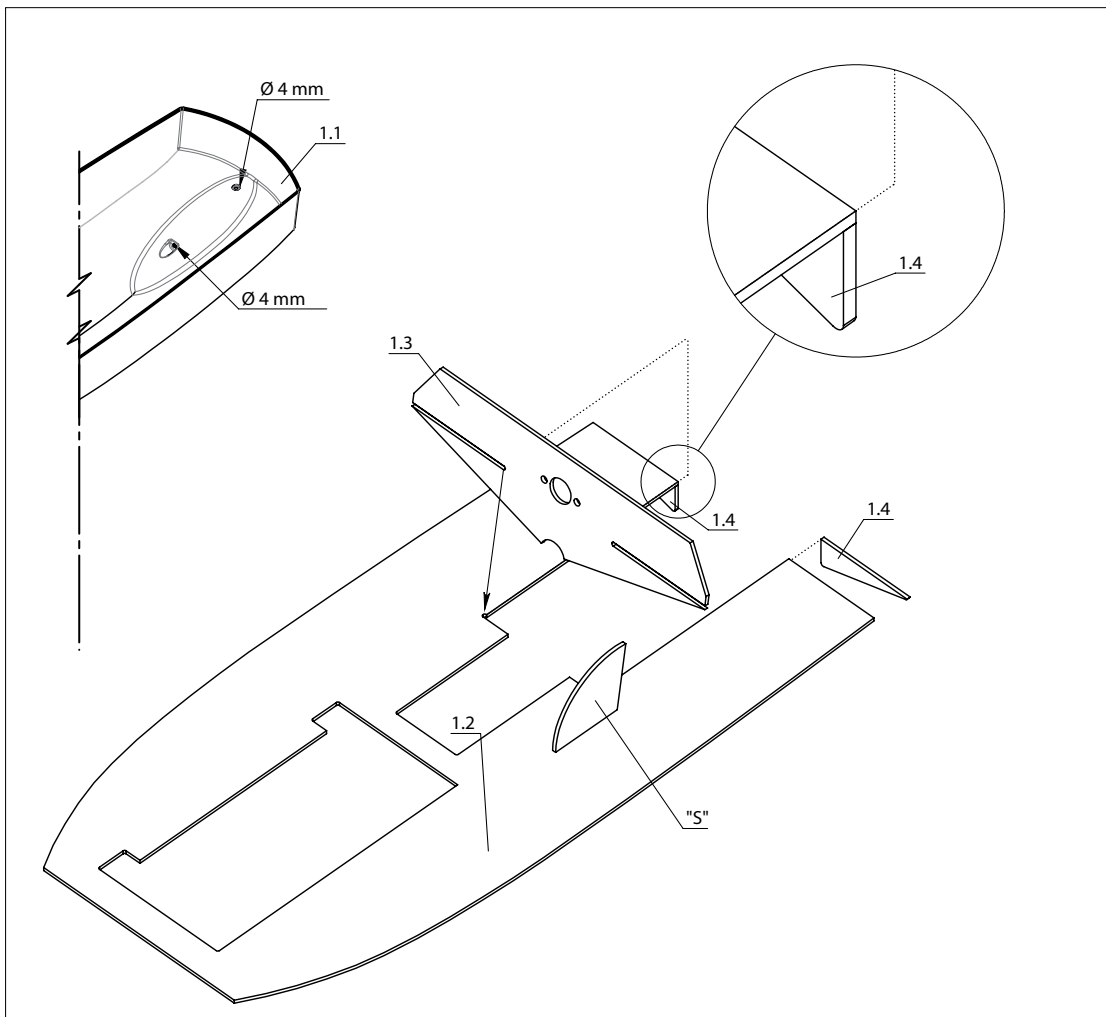
**Lasersheet Cabin floor Wood 1 mm**

## Stage 0 – Boatstand

- Separate the parts from the laser-cut sheet marked „Boatstand“.
- Glue the parts together on a flat surface, as shown in the drawing.
- Allow the glued joints to set hard, then sand and paint the boatstand.
- When the paint is dry, stick protective material (foam rubber, foam plastic or felt) to the contact surfaces. These soft linings protect the hull from scratches during construction.

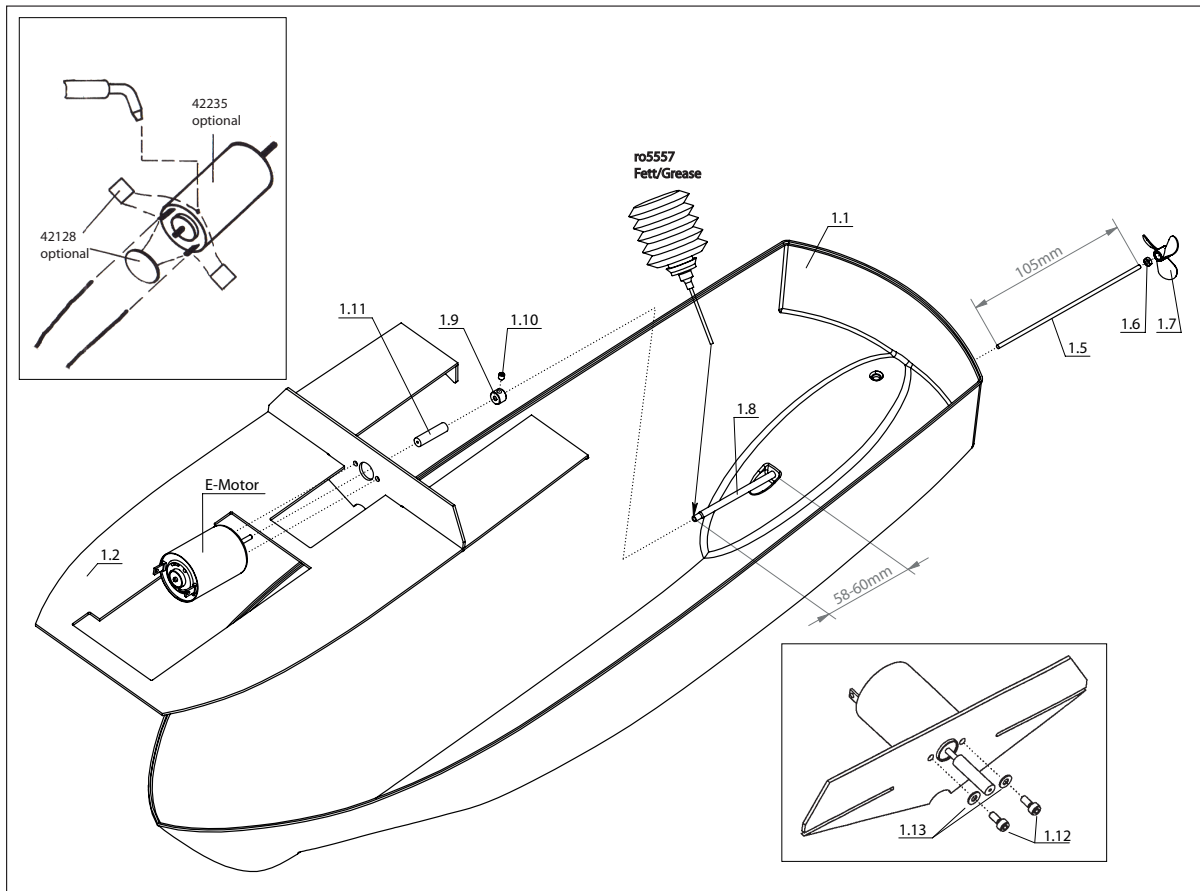


## Stage 1 – Preparing the motor plate



- Separate the parts required from the laser-cut sheet.
- Glue together parts 1.2 to 1.4 as shown, setting the motor bulkhead 1.3 at the correct angle using the template „S“. **Do not glue the template!**
- Drill the holes for the stern tube and the rudder bush in the vacuum-moulded hull 1.1 as shown.

## - Stage 1.2 – Installing the power unit



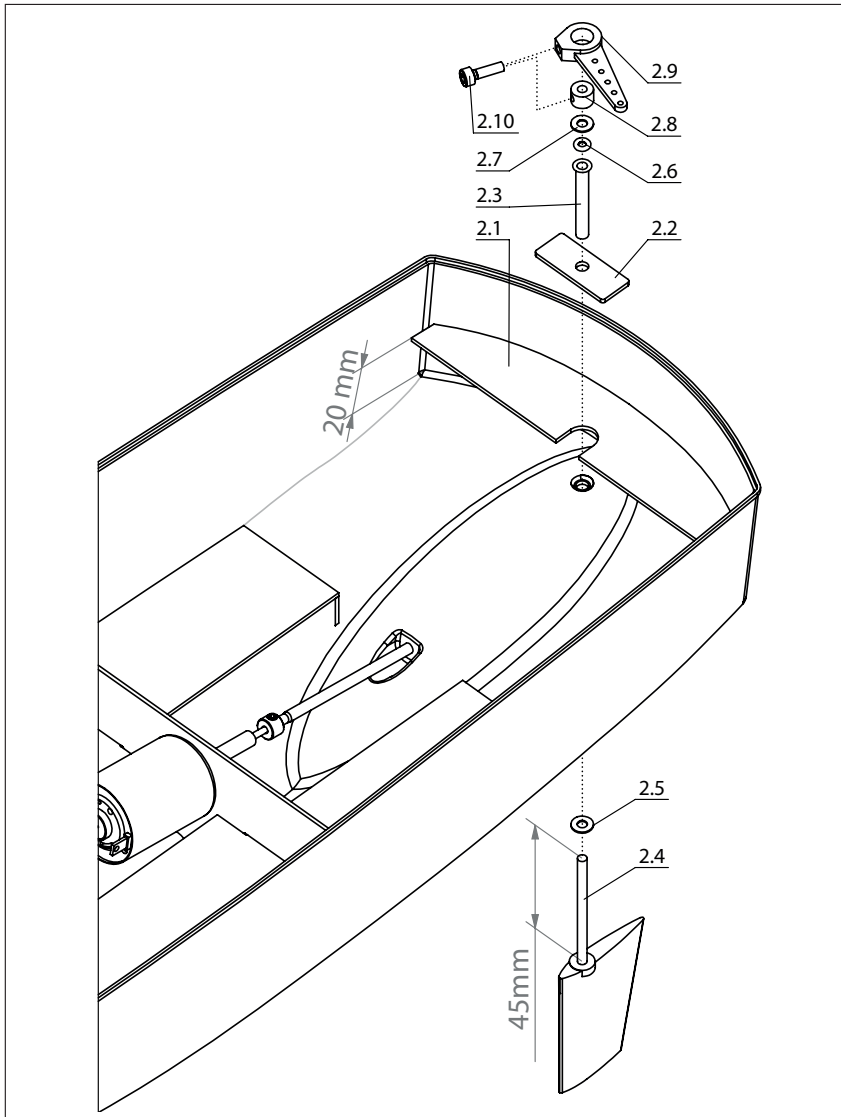
- Cut the drive shaft 1.5 to a length of 105 mm.
- Screw the propeller 1.7 and M2 nut 1.6 onto the shaft, and lock them against each other.
- - Lightly grease the inside of the stern tube 1.8 to act as a seal, then fit the factory-assembled shaft unit 1.5 – 1.7 in the hull, noting the installed dimension.
- - Screw the socket-head screw 1.10 into the collet 1.9. Fit the collet against the flange of the stern tube 1.8 in such a way that the shaft 1.5 is still free to rotate. Tighten the screw in the collet.
- - Push the plastic coupling 1.11 onto the end of the shaft to a depth of about 8 mm.

Before installation, the electric motor must be suppressed and the connection cables soldered.

- - Fix the electric motor to the motor plate using the retaining screws supplied with it.
- - Place the prepared motor plate assembly in the hull, sliding the motor shaft into the plastic coupling to the point where the distance between the end of the motor shaft and the end of the drive shaft is about 2 mm.
- - When you are confident that everything fits properly, with no lost motion, glue the motor plate unit permanently in the hull.
- - Caution: take care not to distort the hull! Use the deck plate 3.1 to check the shape of the moulding. You may need to make minor adjustments to the outside shape of the plate 1.2.
- - Allow the glued joint between the motor plate 1.2 and hull 1.1 to set hard, then glue the stern tube 1.8 to the hull using Stabilit-Express, taking care to produce a watertight joint.

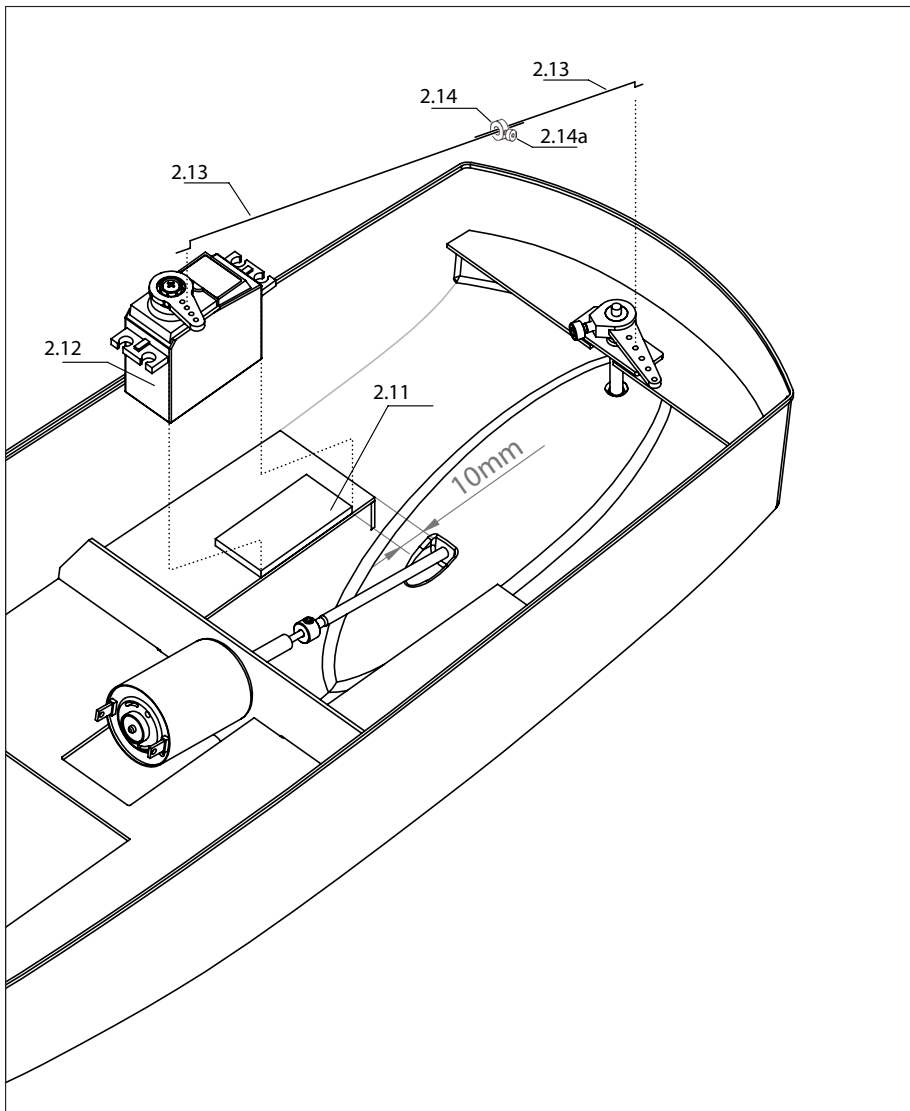


## Stage 2 – Installing the rudder system



- Separate the parts required from the machine-cut sheet marked „Deck“.
- Cut the rudder shaft 2.4 to a length of 45 mm.
- Glue the machine-cut sheet 2.1 in the hull, positioning it central and flush at the stern (it is essential to observe the stated dimension).
- Now assemble the rudder guide components 2.2 - 2.10 in the hull, but do not glue them. Set the rudder straight and at right-angles to the hull.
- When you are confident that everything is positioned correctly, glue the machine-cut sheets 2.2 and 2.1 and the rudder guide tube 2.3 to the hull and the machine-cut sheet 2.2 using Stabilit-Express; take care to produce watertight joints.

## Stage 2.1 – Installing the rudder servo

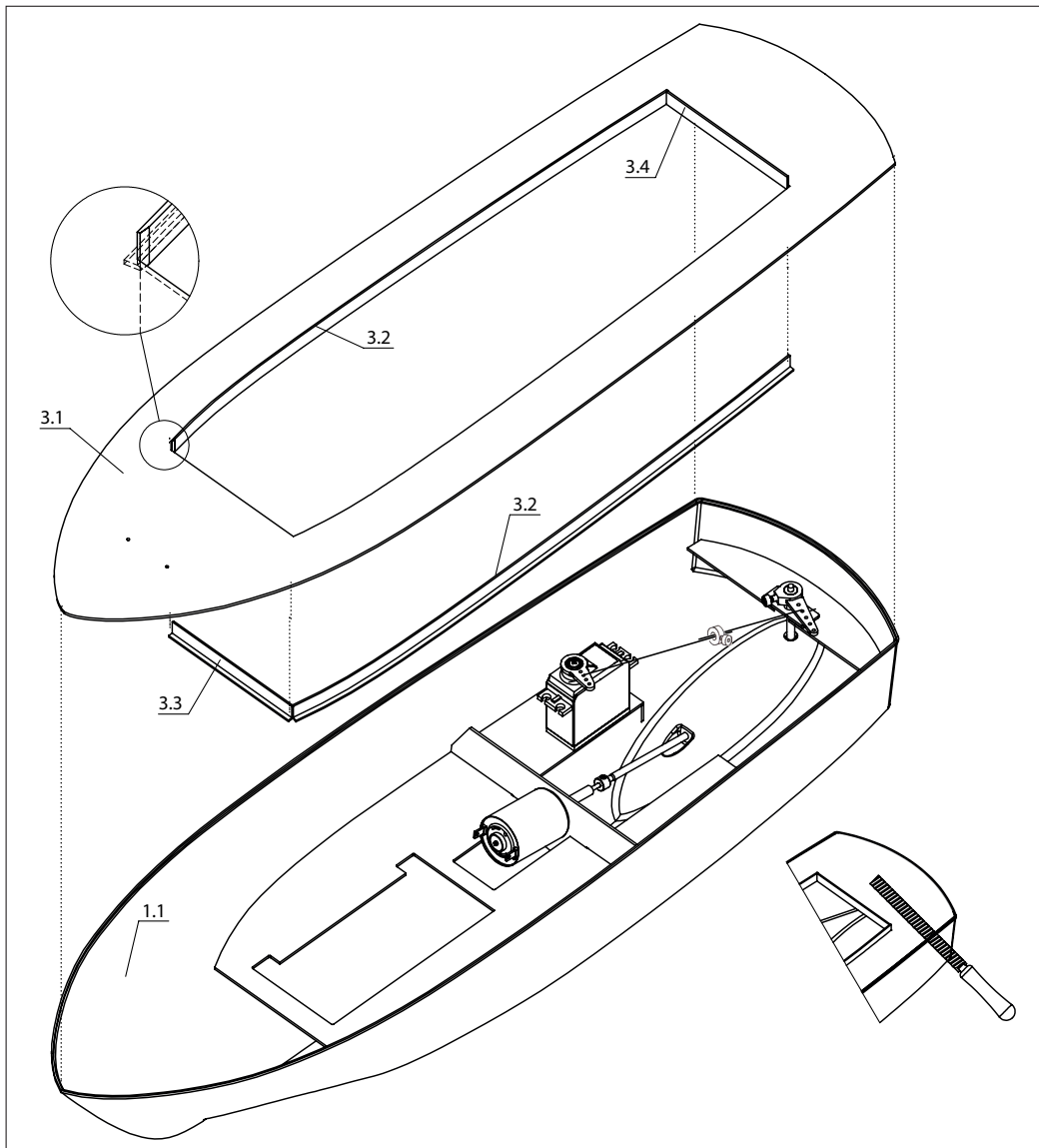


- Stick the rudder servo to the plate 1.2 as shown, using double-sided foam tape or similar.
- Position the servo output arm in such a way that the lever is angled towards the bow by about 15 - 20° when the servo is at neutral (centre). Screw the tiller arm 2.9 to the rudder shaft, positioning its holes parallel to the holes in the servo output arm. It is essential that the rudder should remain at right-angles to the hull.

Hang the linkage 2.13 into the holes of the rudder levers. Connect the two linkages with the adjusting ring and secure with the screw 2.14a. The exact length of the linkage is also adjusted.

**Note:** you may find that there is a height difference in the linkage, depending on the type of servo you are using. The flexibility of the plastic parts caters for any discrepancy.

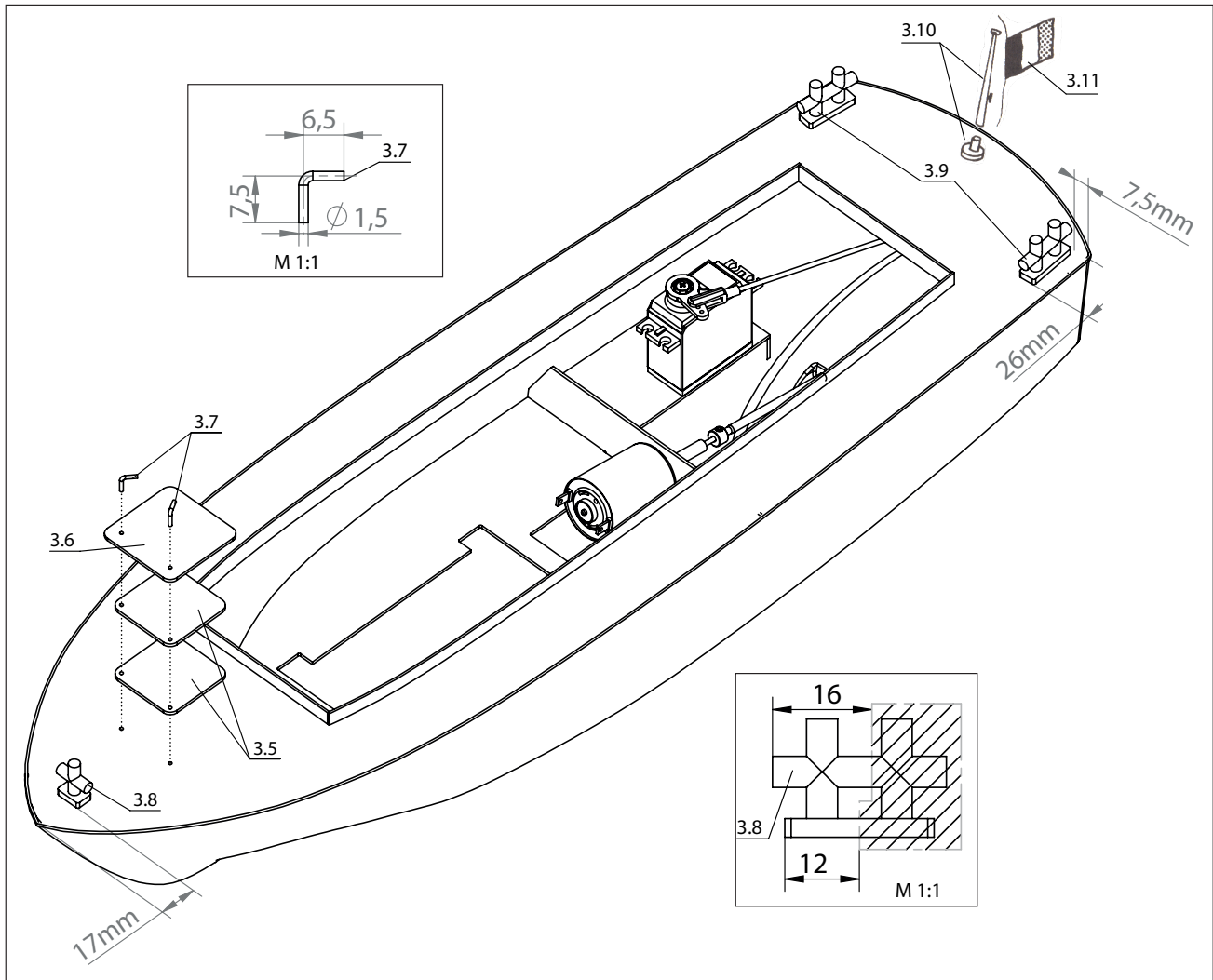
## Stage 3 – Deck



- Separate the deck 3.1 from the machine-cut sheet marked „Deck“.
- Cut the L-profile 3.2 – 3.4 to length, and glue the short edge to the underside of the deck opening all round. This produces the coaming, which prevents spray entering the inside of the hull.
- The production process may result in minor differences in the size of the hull. We therefore recommend the use of Stabilit-Express to glue the deck in place. Use strips of adhesive tape to prevent the deck shifting while the glue is hardening.
- Allow the glued joint between the deck and the hull to set hard, then peel off the adhesive tape and sand back any projecting edges of the hull flush with the surface of the deck.

**Note:** please take particular care when sanding the top edge of the hull in order to avoid unnecessary scratches to the deck.

## Stage 3.1 – Die Decksausrüstung

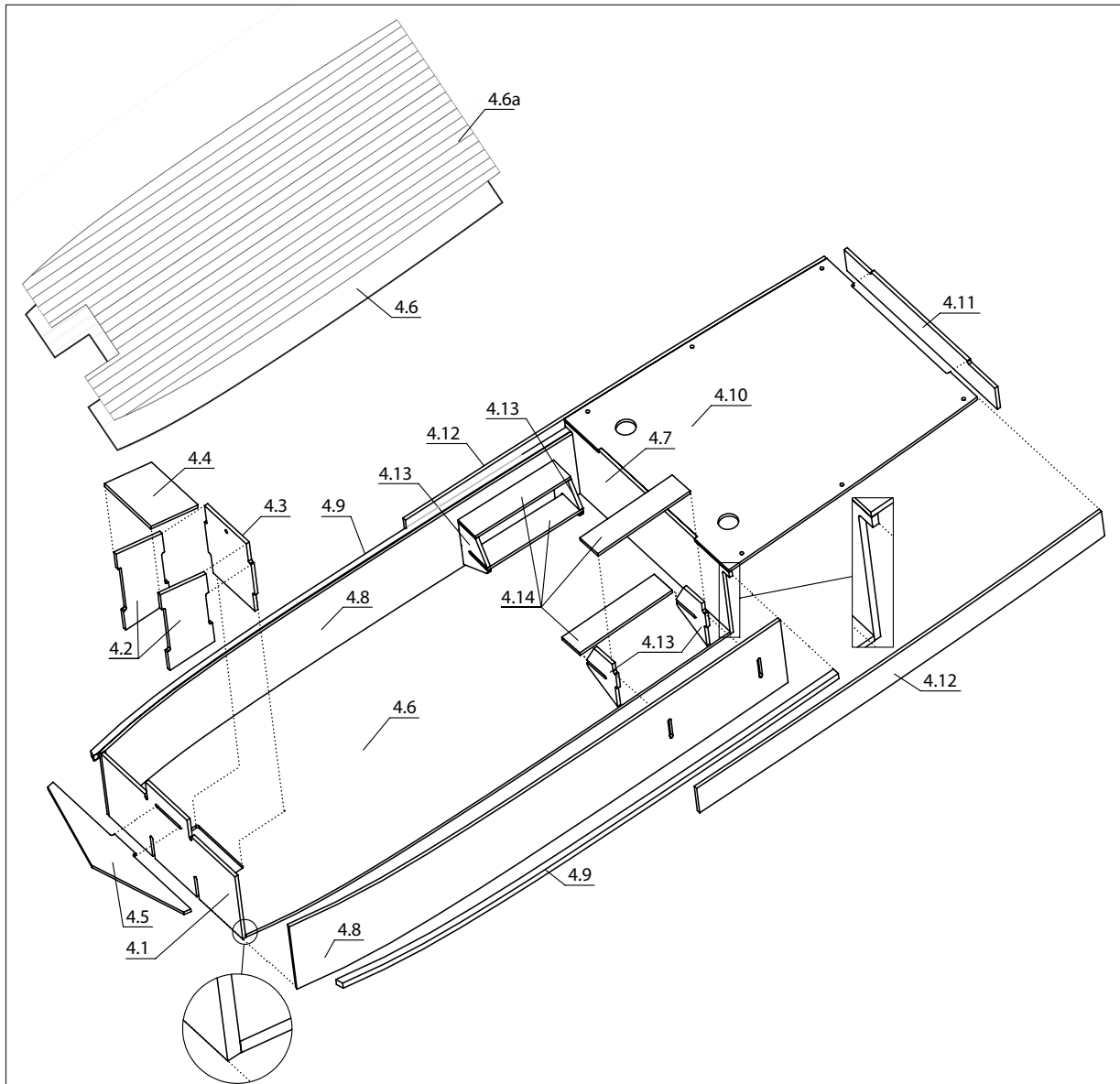


- We recommend painting the deck before installing the fittings.

**Important:** it is advisable to paint all the external parts separately, and only to fix them to the deck when the paint has dried. Where painted components are to be glued, carefully roughen the joint surface before applying glue.

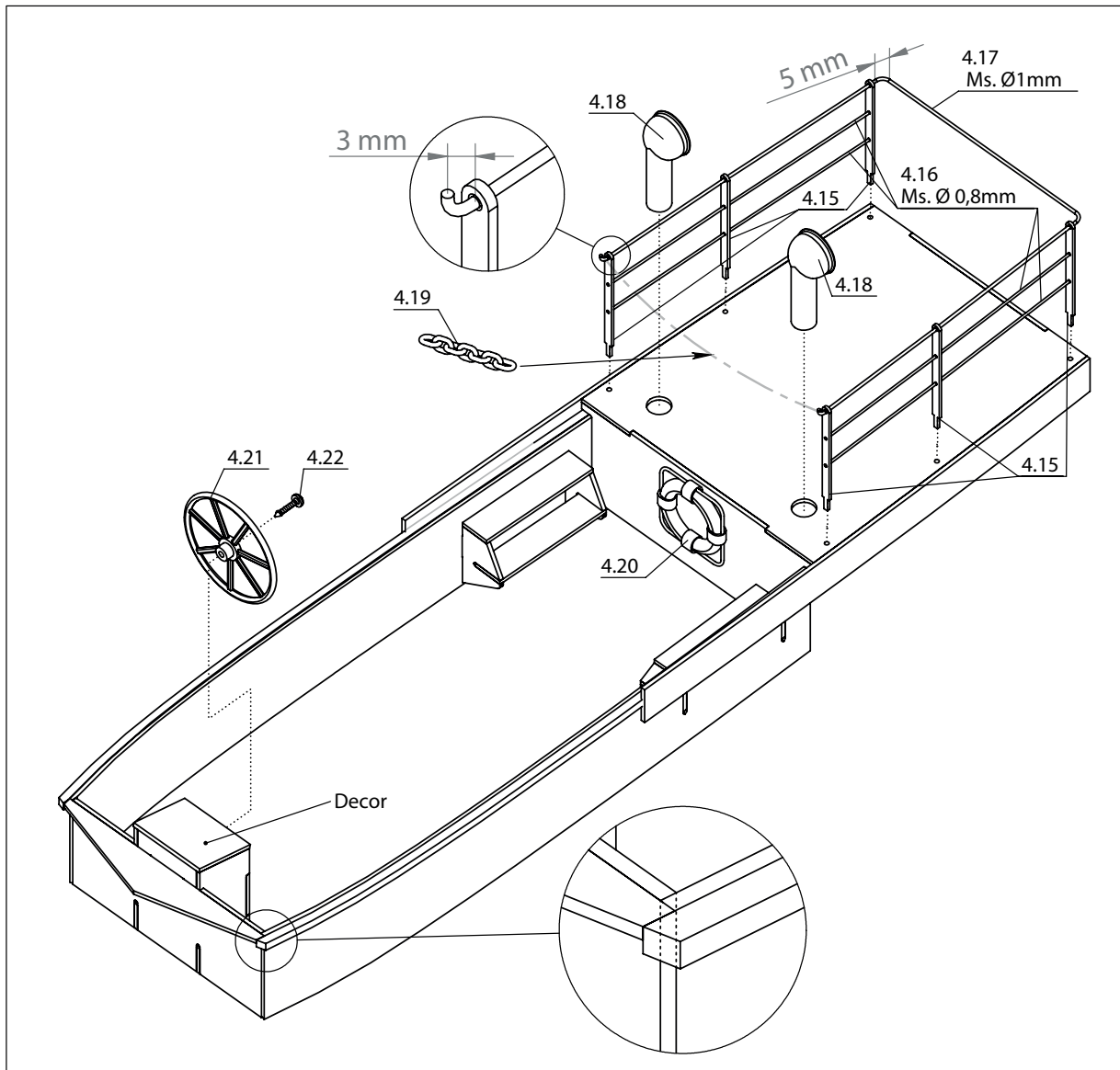
- Separate the parts required from the machine-cut sheet marked „Superstructure“.
- Glue together the hatch components 3.5 – 3.6 as shown in the drawing. Cut the two levers 3.7 from 1.5 Ø brass rod as shown in the dimensioned drawing. Paint the parts before gluing them to the hatch cover. The hatch cover can then be glued to the deck.
- Make the bow bollard 3.8 from one of the double cruciform bollards 3.9 as shown in the drawing. Paint the two stern bollards and the bow bollard, and glue them to the deck. Please observe the stated dimensions.
- 3.10 to 3.11 and place it in a suitable place on the back deck. When converting the Dolly as a towbar with the towing gear (order no. ro1434), do not stick the flag to the position shown, so that the towing cable can move freely.

## Stage 4 – Internal unit



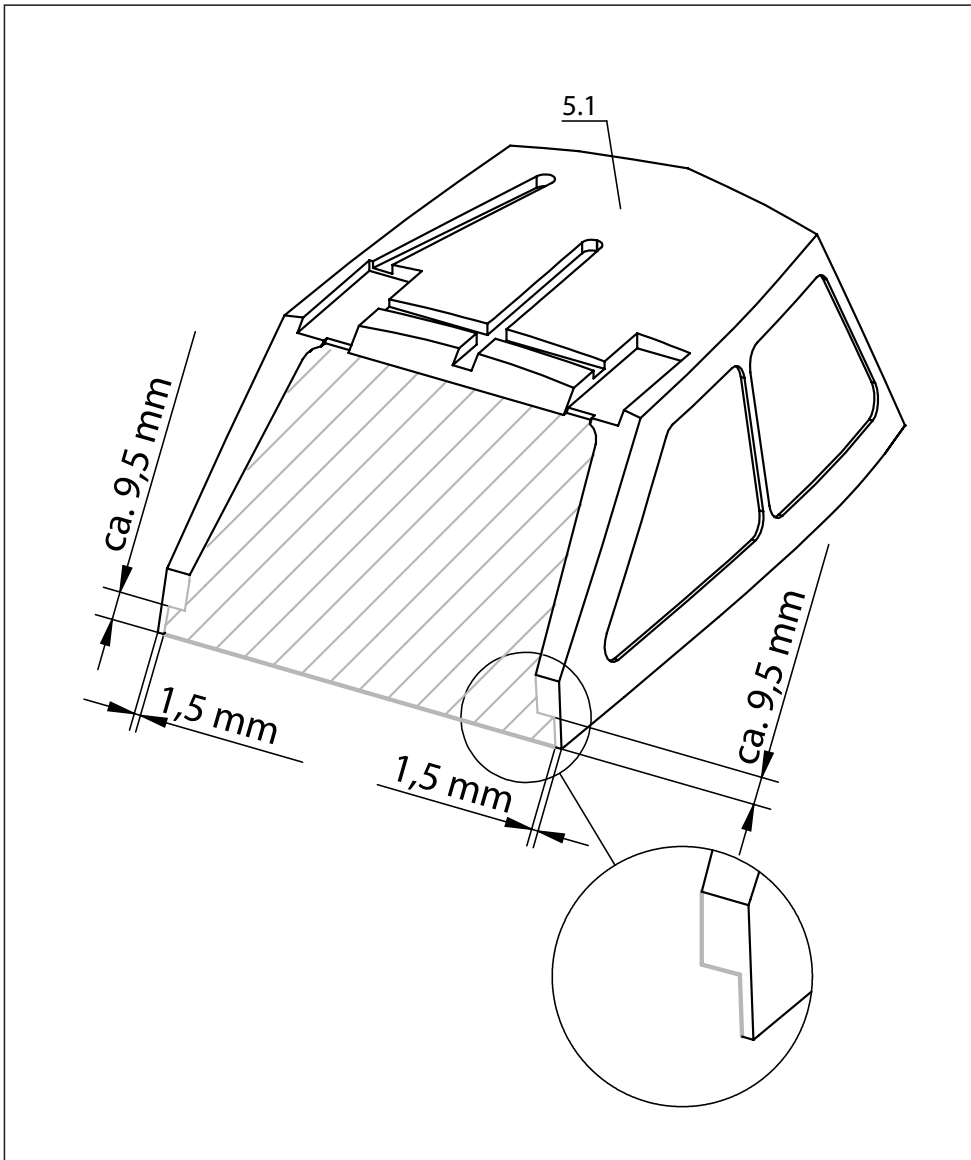
- Separate the parts required from the machine-cut sheet marked „Deck, fittings“.
- Glue parts 4.1 and 4.5 to each other at right-angles. Glue parts 4.2 – 4.4 to part 4.1 from the other side. Finally glue this sub-assembly to the front of the base plate 4.6, keeping it flush.
- Glue part 4.7 to the base plate 4.6 from the rear, keeping it flush. Now glue both parts 4.8 (right and left) to parts 4.1, 4.7 and 4.6.
- Glue the 3 x 3 mm square profile 4.9 to the top edge of part 4.8, with the edges flush (resting on the coaming). Caution: curve the strips slightly beforehand, to avoid placing part 4.8 under stress.
- Sand all the transitional areas carefully, referring also to the picture for Stage 4.1.
- Glue the engine cover plate 4.10, the walls 4.11 and 4.12 in place. It is a good idea to place the internal unit in the deck opening to check the fit. Protect the edges of the deck opening with adhesive tape to prevent the parts becoming stuck!
- Allow all the glued joints to set hard, then sand all the parts of the internal unit and paint them.
- Then fit the clear lacquered plank cover 4.6a onto the part 4.6 and glue.
- Assemble the companionway steps 4.13 – 4.14, sand the assemblies smooth and paint them. Glue them to the walls on both sides.

## Stage 4.1 – Internal unit fittings



- Insert the railing stanchions 4.15 in the holes in the engine cover plate.
- Prepare the upper handrail 4.17 from the 1 mm Ø brass wire supplied in the kit, as shown in the illustration. It is important to set the stanchions parallel to each other, and vertical relative to the motor cover plate.
- Cut the lower rails 4.16 from 0.8 Ø mm and check that they fit through the railing stanchions.
- When the railing on the engine cover plate is complete, glue them using Acrylit glue.  
When you have completed the railing assembly, it can be removed, cleaned up and painted, then glued permanently to the engine cover plate.
- Cut the chain 4.19 to the appropriate length (it should sag slightly) and connect both ends. You may wish to apply a tiny drop of glue at both ends to prevent the chain slipping off.
- Paint the two ventilators 4.18 and glue them in the prepared holes.
- Now glue the lifebelt 4.20 to the rear wall of the internal unit as shown in the illustration.
- Fix the steering wheel 4.21 to the control stand using the screw 4.22, and apply the instrument decal.

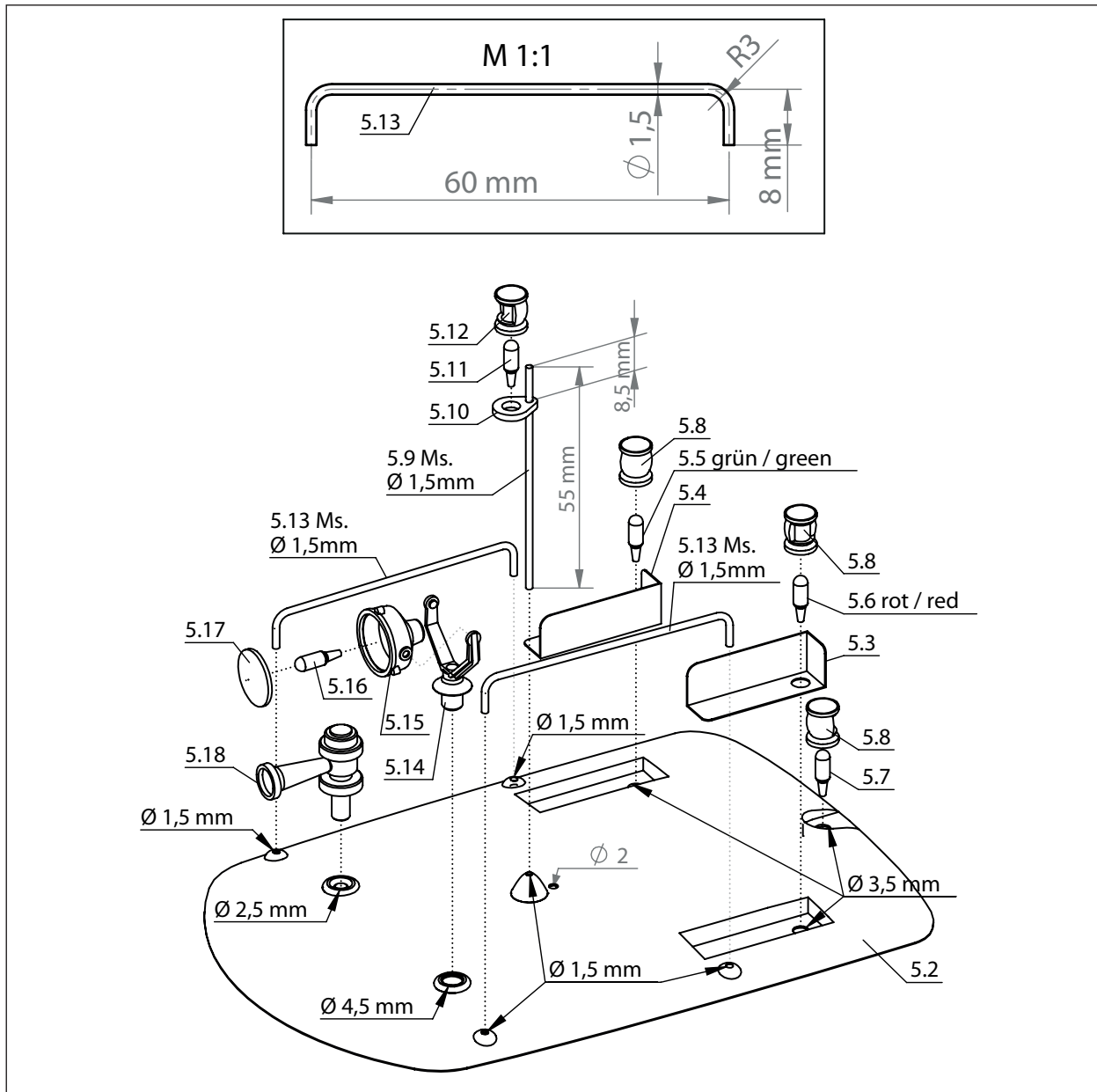
## Stage 5 – The wheelhouse



- Cut out the rear wall of the vacuum-moulded component 5.1 as shown.  
**Note:** the stated dimensions may not be quite accurate; it is important to check the exact fit.
- The window masks (decal sheet) must be applied before the wheelhouse is painted.

**Please ensure that no paint gets onto the inside of the windows when painting the wheelhouse.**

## Stage 5.1 – The roof



- Drill holes in the vacuum-moulded component (roof) 5.2 at the marked points, using the stated size of drill.
  - Prepare the two handrails 5.13 (see dimensioned drawing) and the lamp support 5.9 from the 1.5 mm Ø brass rod supplied.
  - Separate the lamp platform 5.10 from the laser-cut sheet marked „Deck“, and glue it to the wire support, spaced as stated.
  - The individual roof components can now be painted.
- When preparing the navigation lights please note the following:

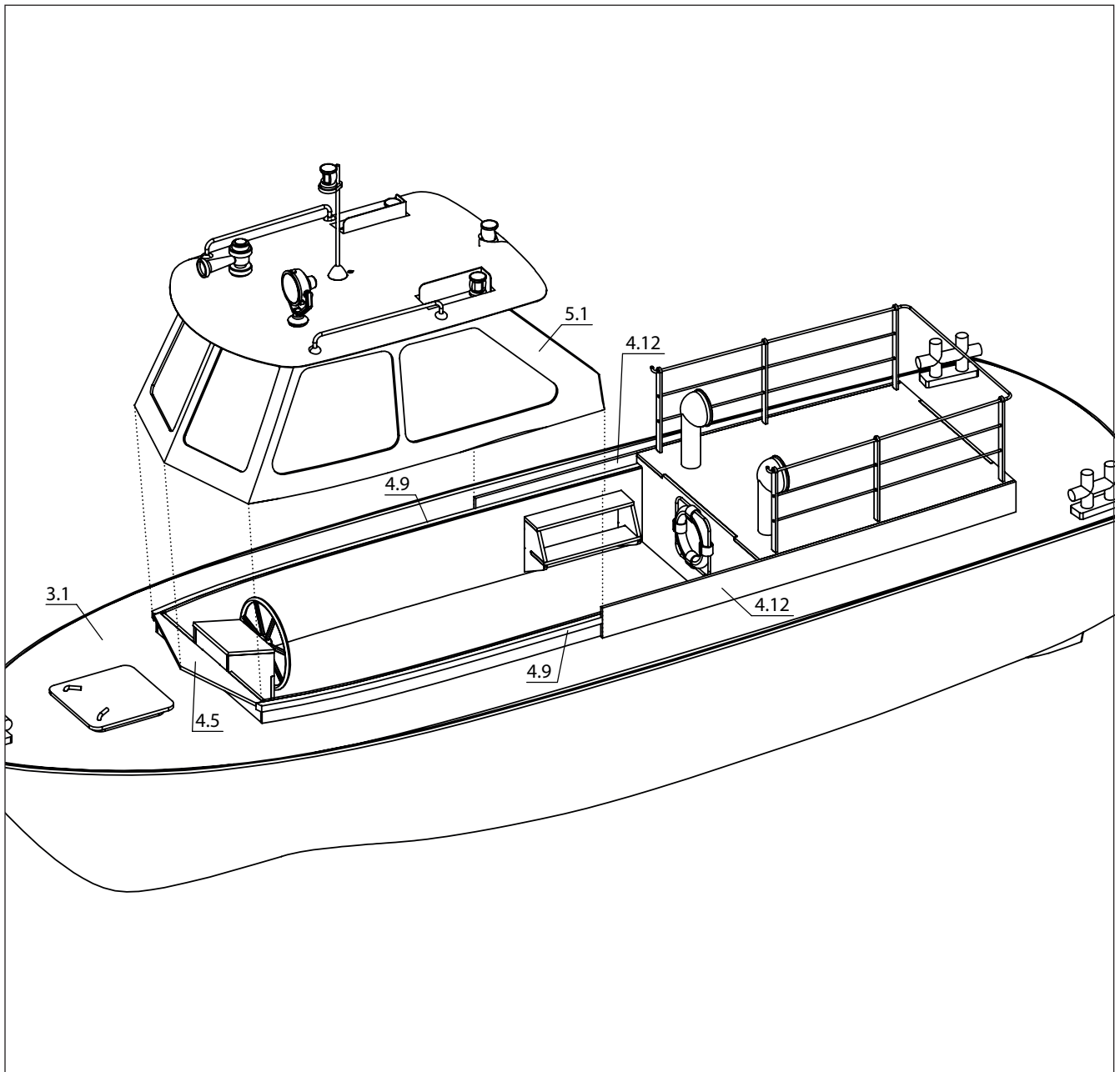
**Green = right-hand side, as seen from the stern (starboard)**

**Red = left-hand side, as seen from the stern (port)**

- Now place the roof on the wheelhouse (sliding it forward into the slots as far as it will go). Mark the position of the holes for the navigation lamps on the roof; the lighting system leads are routed through these holes later.
- The fittings can now be fixed to the roof before it is glued to the wheelhouse.

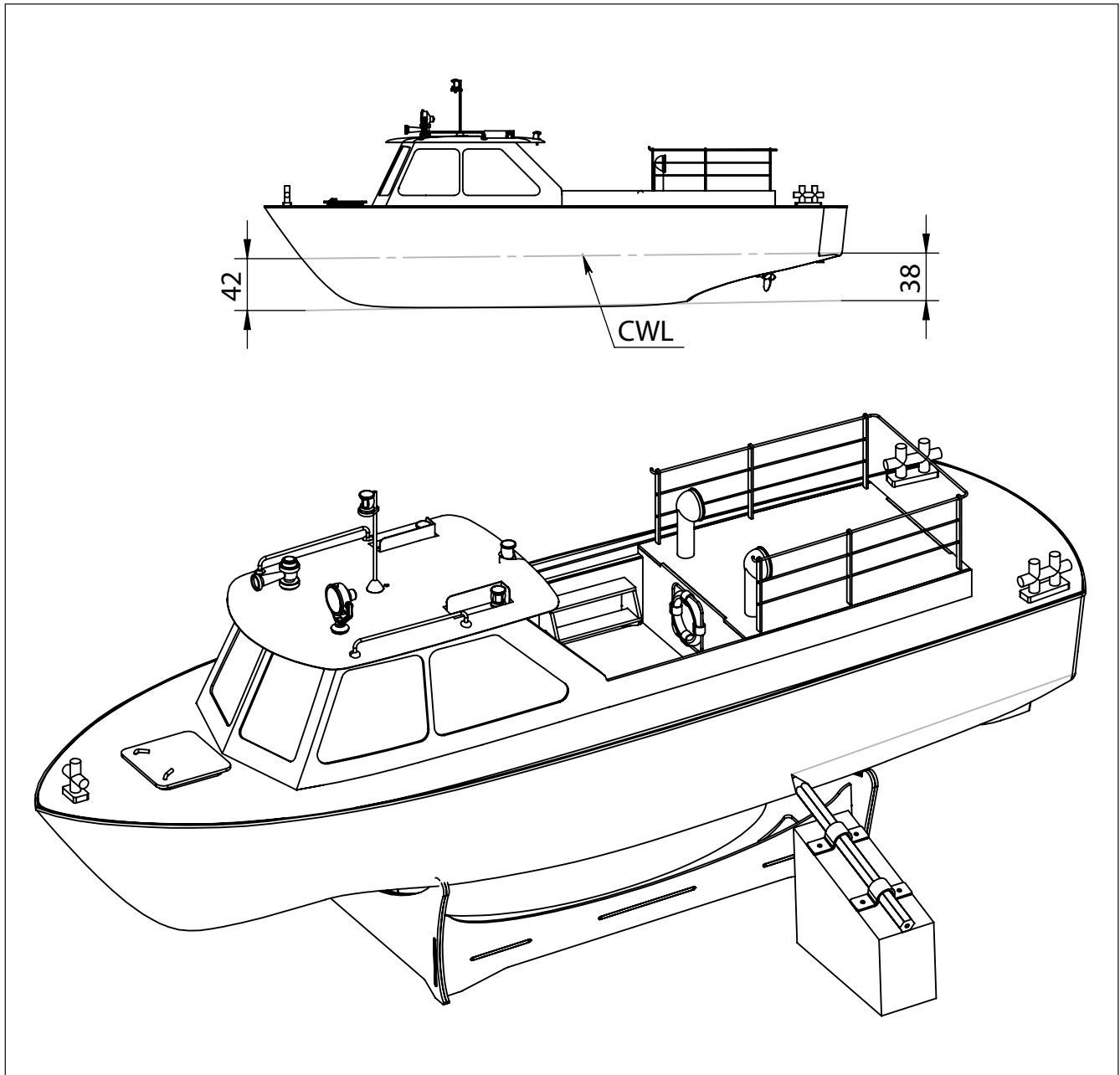


## Stage 5.2 – The wheelhouse and internal unit



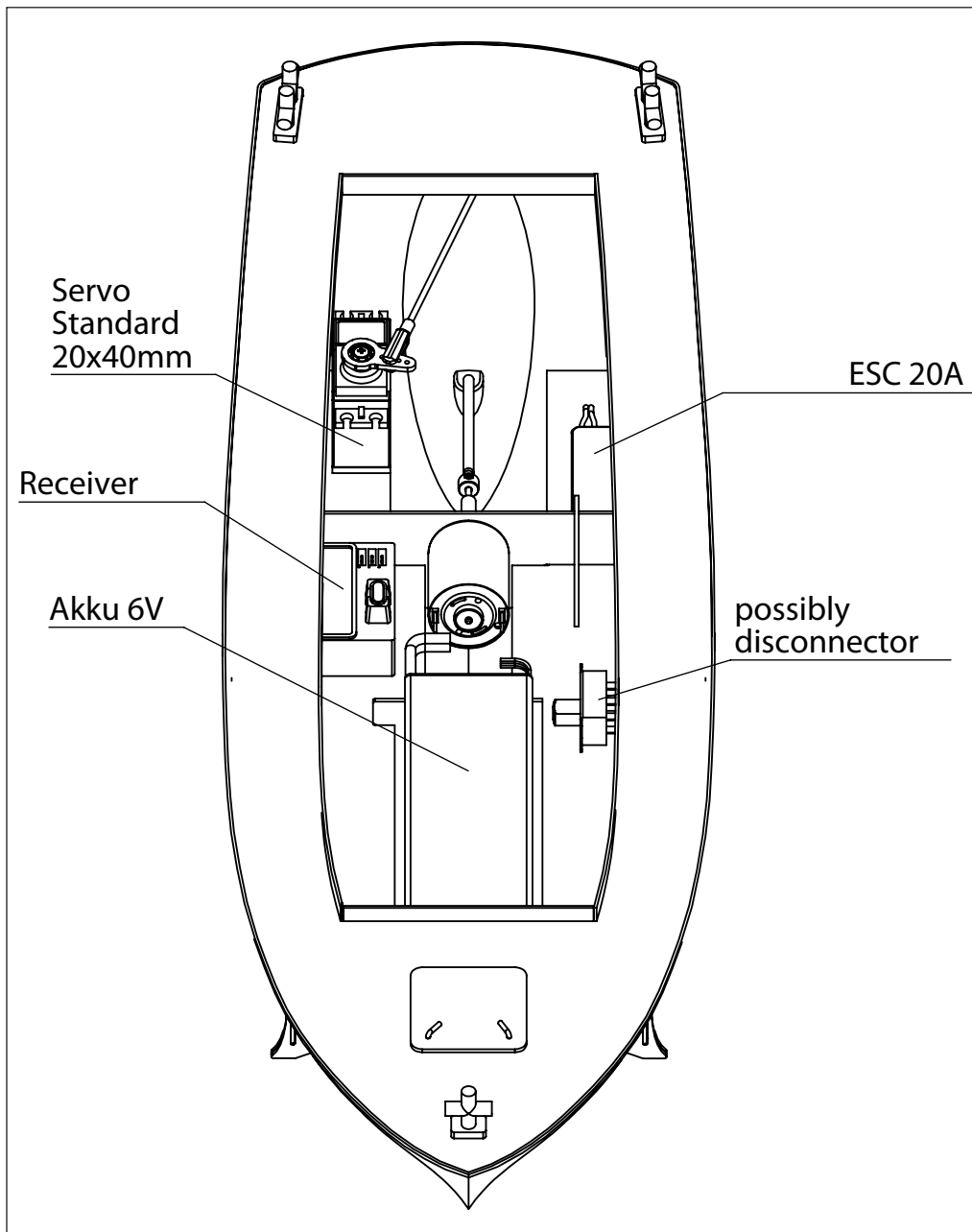
- Place the internal unit in the hull, and temporarily slide the wheelhouse over the supports 4.9, ending flush against part 4.5 at the front.
- The longitudinal plates 4.12 are provided slightly overlength to allow the builder to trim the parts to exact length to match the wheelhouse. Mark the overlap at both ends, then cut parts 4.12 to length.
- Please check that the wheelhouse fits correctly, and ensure that the wheelhouse and the internal unit rest snugly on the deck 3.1 all round.
- Carefully tack the wheelhouse to the internal unit. Remove the whole assembly from the hull before gluing the parts together permanently.

## Stage 6 – Making the waterline



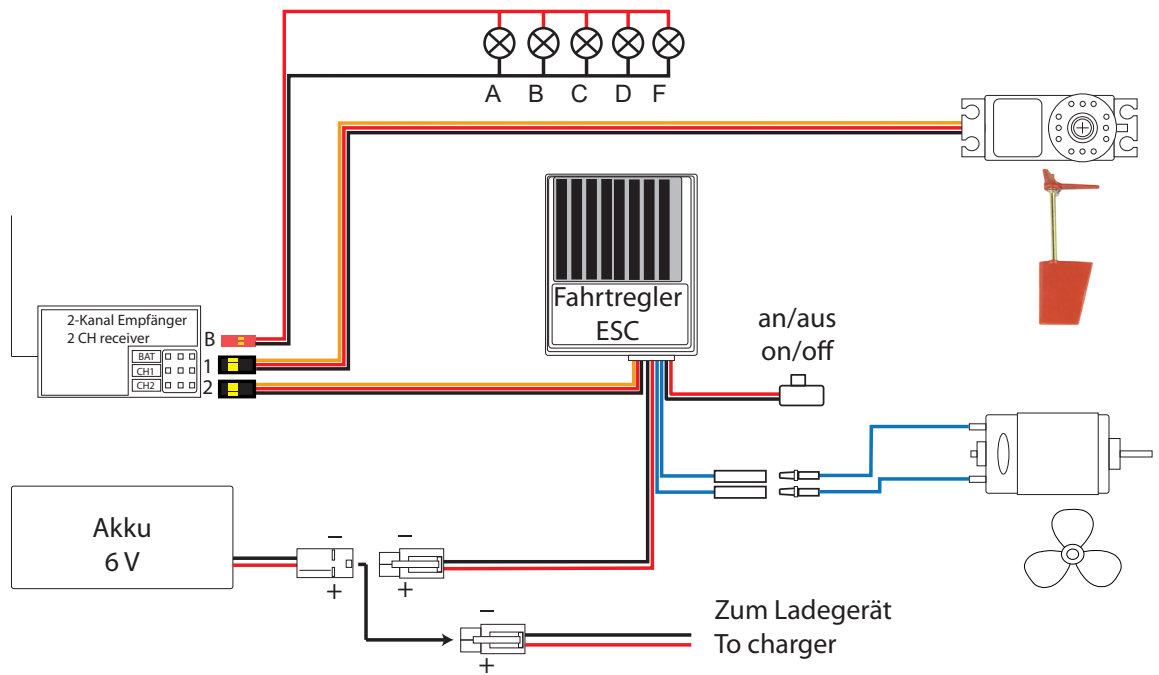
- Mark the waterline as shown in the illustration.  
**Ensure that the boat is standing exactly horizontal before you do this!**  
 Please refer to the section entitled „Marking and painting the waterline“ in the introduction.

## Stage 7 – RC installation



- Temporarily install the components, but do not fix them in place permanently at this stage.
- Place the complete model boat in water, and check that the waterline is parallel to the surface. If this is not the case, you can correct the model's attitude by re-positioning the RC system components.
- Cable B to the lighting units can be run from the receiver battery compartment, which is not used. If you wish, it is also possible to install an On / Off switch.
- Check the range of the radio control system before running the boat for the first time. You may need to alter the position or deployment of the receiver aerial to obtain adequate range.

## Wiring diagram Dolly for a 2 channel Remote Control with permanent lighting.



## Wiring diagram Dolly with switchable lighting, headlights and special function fire monitor.

