SAITO®

Paddle steamer

VICTORIA

Assembling Instructions

SPECIFICATIONS

LENGTH	1, 250 m/m
WIDTH	310 m/m
HEIGHT	345 m/m
WEIGHT (WITHOUT BALLAST)	7 kg
ENGINE	Y2DR
BOILER	B2F
R/C CHANNEL	3CH

BEFORE ASSEMBLING

We would like to express our appreciation for your purchasing “VICTORIA”.
This is a ship which we designed originally based on a real paddle steamer. You will find its elegant outlook worthy the name of “VICTORIA” which is the goddess of victory.

ITEMS TO BE PREPARED FOR ASSEMBLING

TOOLS

Hand saw (with fine teeth), Cutters (large and small), Small plane (balsa plane), borer, files (flat and round), sand paper (#180 , #240~800), radio pliers, nippers, screwdrivers, router, pin vice, clips, hammer, rule, etc

ADHESIVES

The numbers 1 , 2 , 3 ,and 4 in this manual indicate the following adhesives (in the order of time required for gluing):

1 **Instant adhesive**
Low and High-viscosity types each for woodworking purpose.

2 **5-minute Epoxy adhesive**
This features the required short-gluing, and combined use with the instant adhesive will reduce the work time significantly

3 **30-minute Epoxy adhesive**

4 **6-hour Epoxy adhesive**
This is used for gluing the veneer frames with FRP. Place the mixture of the two liquids in a can and heat it with a dryer until it liquefies. In 2 to 3 hours, it will harden.

Polyester paste
To mend any undesigned hollows or scratches during working.

Paint

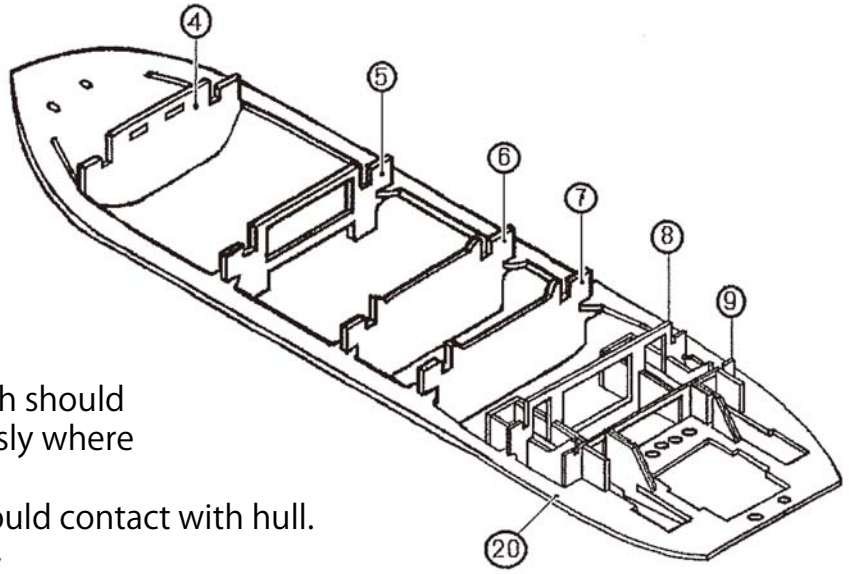
A lacquer or urethane system that is familiar to you is recommended for the body. For smokestacks and other small fittings, you can use the standard paints for plastics (Placolor) of which many kinds of color are available. For etching before paint, sand papers of #240 to 800 are recommended.
Small fittings are better painted before gluing. Please be sure to read the section “Painting and finishing” in the following page before assembling.

PAINTING AND FINISH

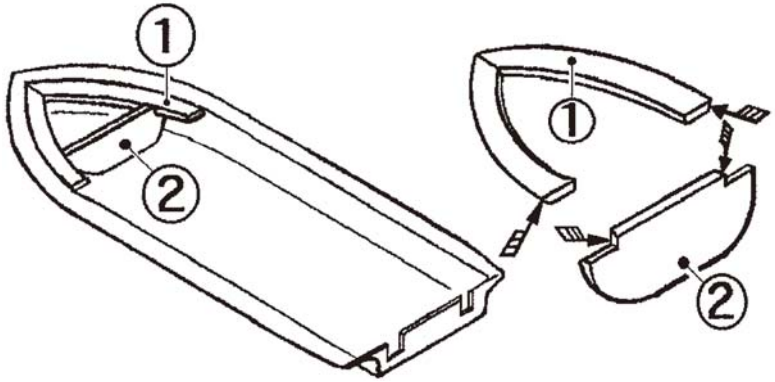
Note: Painting of some parts or portions is recommended to be done before assembling or mounting of handrails.

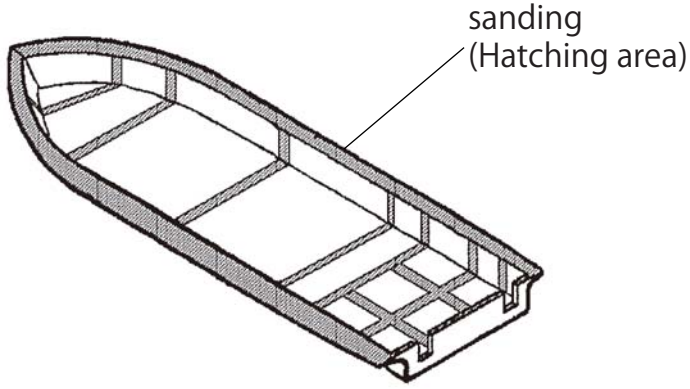
- Large holes, such as those of small nails, etc., should be filled with toothpicks, etc., being glued in them.
- Apply #180 paper on the body of the ship and the cabin house, and apply lacquer surfacer.After the surfacer is dry, use putty to fill holes or scratches. Repeat the work several times until the grain is no longer noticeable. Use #240 paper and finally, #400, to prepare the surface.
- Small articles must also be painted before mounting (window frames, doors, ventilators, boats, mast and other fittings).
- Apply white paint as the final coat, and use #600 to 800 paper on the surface. Repeat the work 2 to 3 times, to finish the surface. Glue (28) after mounting the mast guide pipe, ventilator etc. on the front deck, and the connecting area should be shaped neatly.
- Paint red below the waterline and white above. Paint the rear side of the deck in mahogany non light.
- For other parts, refer to the color of attached drawing. Attach and paste transparent vinyl chloride plates to the window hole (from inside) to prevent water entry.
  *Except the nearby window of the boiler, burner, and 4th floor to avoid overheat.
- For small and fine parts, placolor is recommended.

ASSEMBLING 1



- When a die-cut part is not readily removed, use a suitable cutter to separate. Do not forcefully pull it.
- Sand the surface of the die-cut parts with sandpaper of size say, #320, to facilitate later painting work.
- Make insider surface of the FRP hull flat by sanding as possible. And wipe the surface to clean before gluing.
- As the drawing shows, assemble temporarily the die-cut parts which should be glued with the FRP hull, and put them into hull to check previously where would contact with hull.
  Then, roughen by sanding the surface of the die-cut parts which would contact with hull.
- Before glue the hull and each die-cut parts, put the temporarily assembled frame into the hull to check if any part of FRP and veneer would contact narrowly. If there are any narrow contacts, grind the veneer parts slightly to avoid distortion or inexact positioning.
- To glue FRP hull with each die-cut parts, using adhesive [3] or [4] is recommended.
  To glue a die-cut part to the others, using adhesive [1] or [2] is recommended.





[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

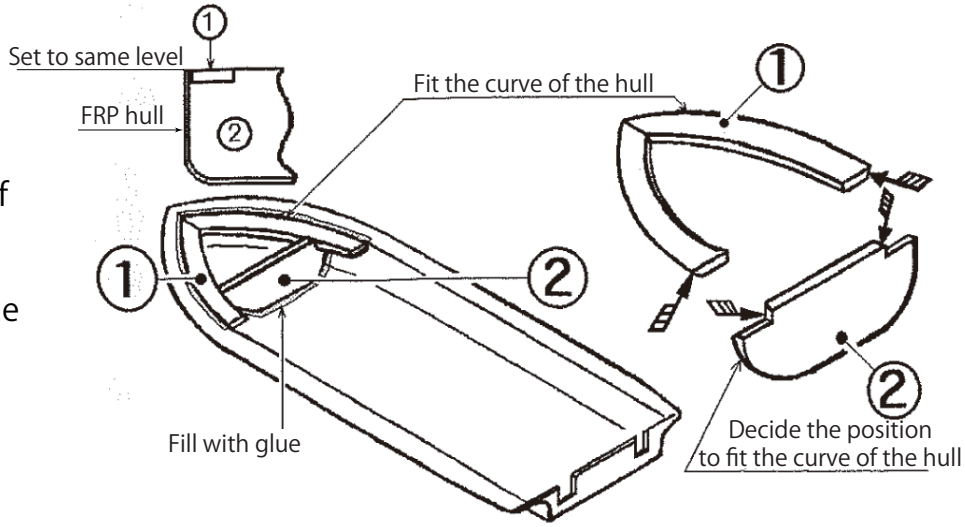
ASSEMBLING 2

- As the drawing shows, glue either side of part ① by [1] previously. The arrow-marked surfaces should be formed obliquely in order to fit the FRP hull.

- Glue parts ① and ② to the bow using [3] or [4]. The position of part ② should be determined in order to fit the FRP hull.

- To simplify the work, join the parts ① and ② first and then glue the assembly to the bottom of the ship.

※Since inside of the hull isn't flat, there might be any hollows between part ② and the hull . Fill such hollows with [3] or [4] as same as for the other glued part or surfaces.



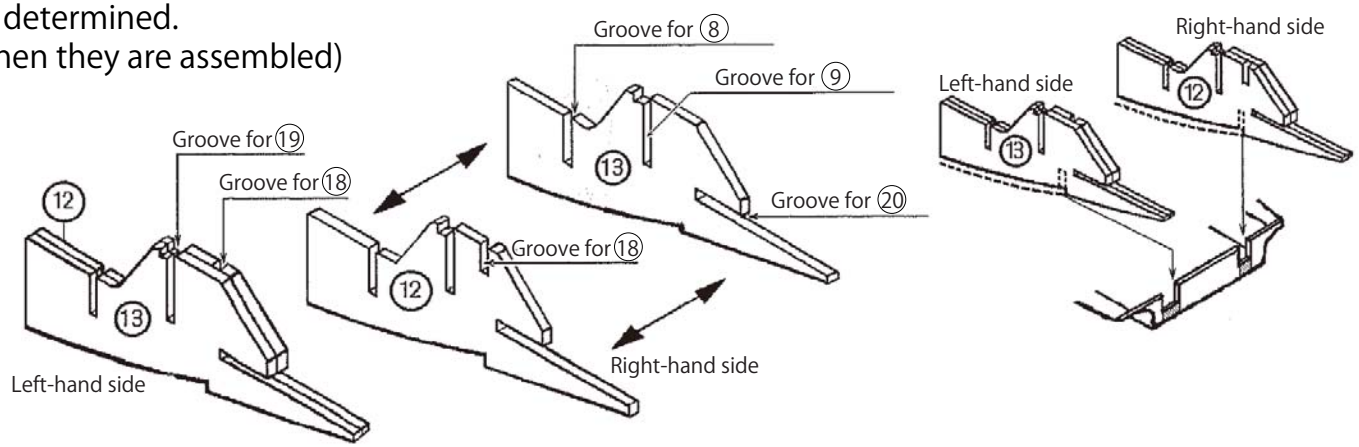
ASSEMBLING 3

- Glue part ⑫ (has a groove to fit ⑱) and ⑬ with [2].

- There are two parts, left-hand and right-hand side, which form a pair. Be careful not to use two identical parts.
  ※When they assembled with the deck board, either groove should be faced each other.

- As the drawing shows, when put the bottom step into the grooves on the tail of the hull, the position of the deck ⑳ would be determined.

(dot-lines show the bottom of the hull when they are assembled)



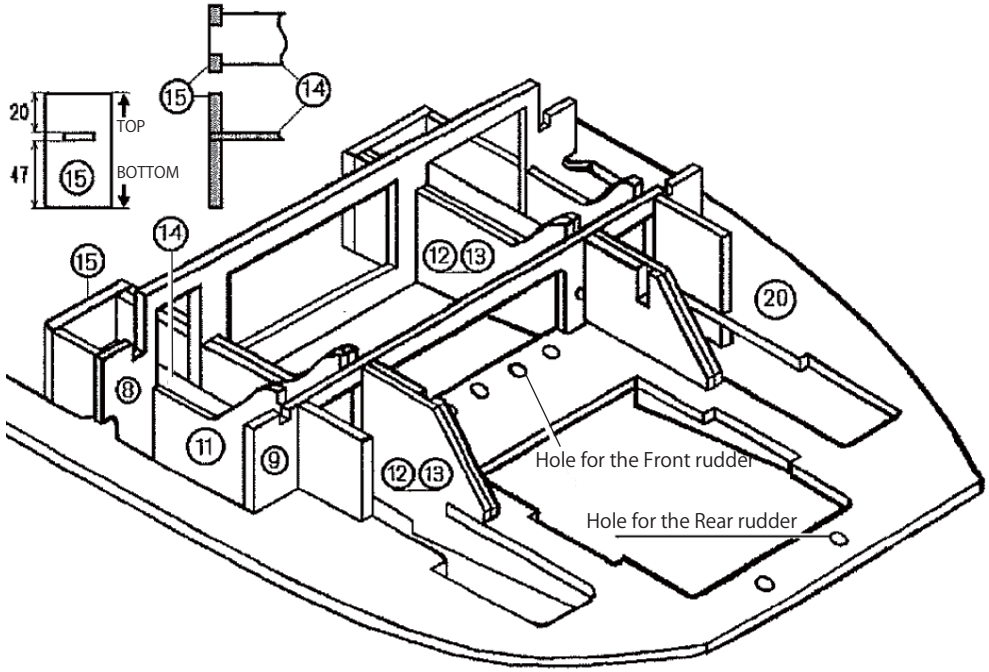
ASSEMBLING 4

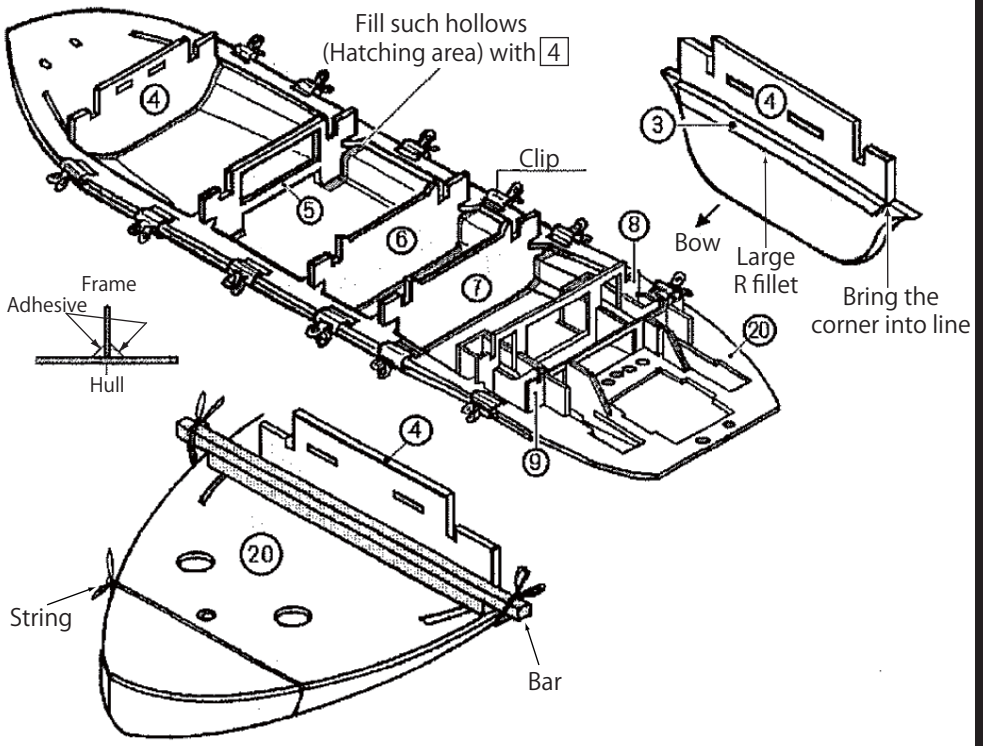
- If it's too tight to fit each groove and frame, enlarge the groove with a file before gluing the deck with frame.
- Insert the frame ⑧,⑨ in the grooves of ⑫,⑬ and ⑪ and glue them on the stern of the deck ⑳, using [3]. Glue ⑭ and ⑮ with [1] or [2].

※Be careful not to make ⑮ upside down or left-right reversal.

- Glue ③ to the frame ④ with [1]. The part ③ is used to make the deck corners round.
- Glue the frames ④,⑤,⑥,and ⑦ to the bottom of the hull in this order, and together with the deck ② using [4].
- The periphery of the deck is recommended to be fastened with clips as shown. The frame ④ and the deck ⑳ must be held with 2 pieces of bars and a string.

※Fill undesigned hollows with [4].





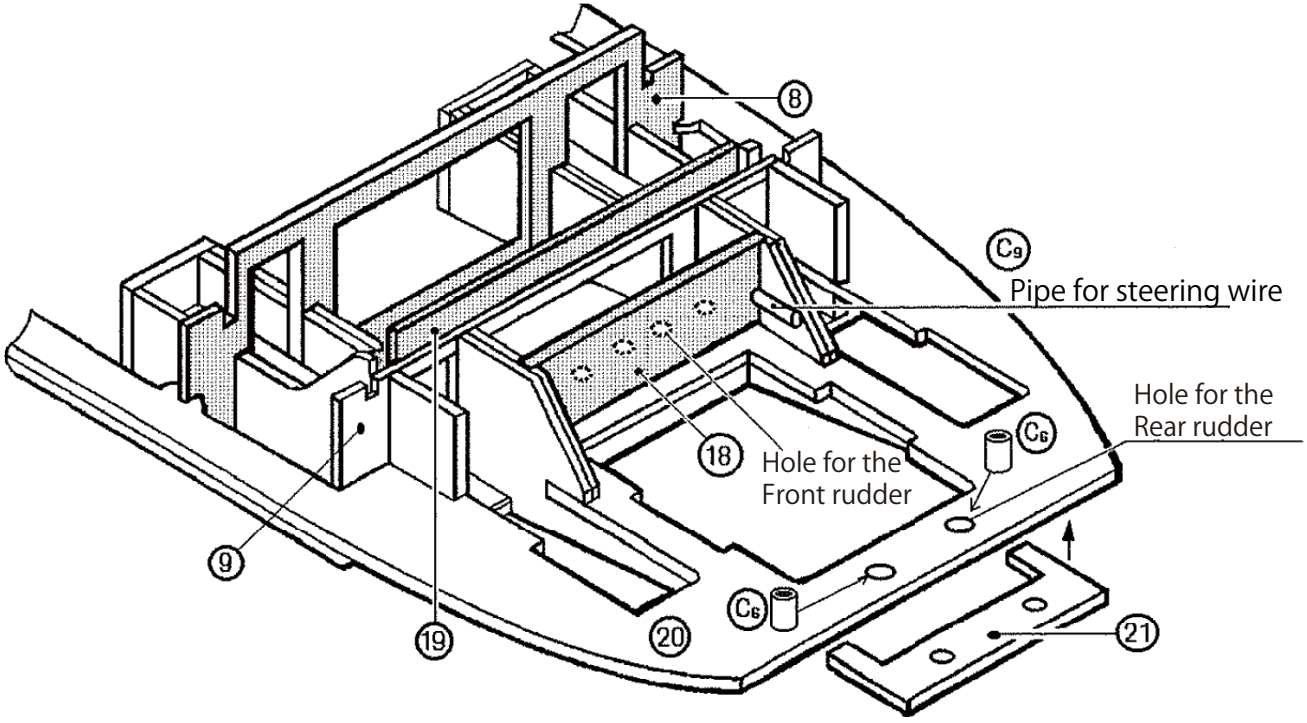
[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

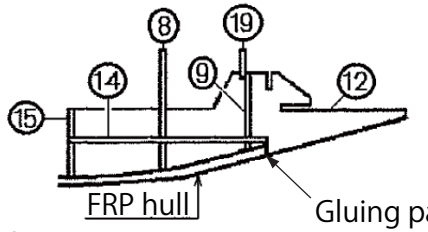
ASSEMBLING 5

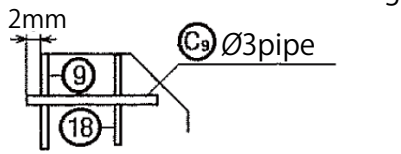
- Drill holes on the FRP hull bottom of the ship which are vertical in relation to the 4 front rudder holes on the deck ⑳. Glue 4 front rudder pipes Ⓒ6 inside the rudder holes using [3]. Insert a bar of a suitable size in the pipe to check if the pipe is vertical to the bottom of the hull. Use of a rule, etc. is necessary for this checking.
- Glue the frame ⑧. And glue ⑲ on the top-side groove of the frame ⑨ using [1] or [2].

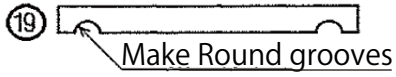
※When the steering rod of the paddle touches to ⑲, grind that part of ⑲ with a file.

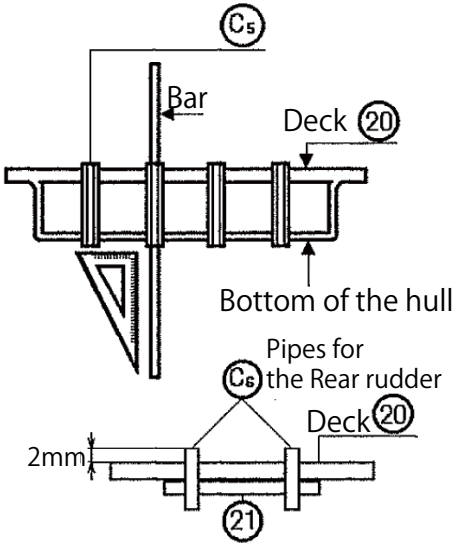
- After gluing Ⓒ6 , glue ⑱ using [1] or [2].
- Glue ㉑ aligning to the rear rudder holes using [1] or [2].
- Glue 2 rear rudder pipes Ⓒ6 inside the rudder holes using [3].
- Put the pipe for steering wire Ⓒ9 through the deck and glue using [1].







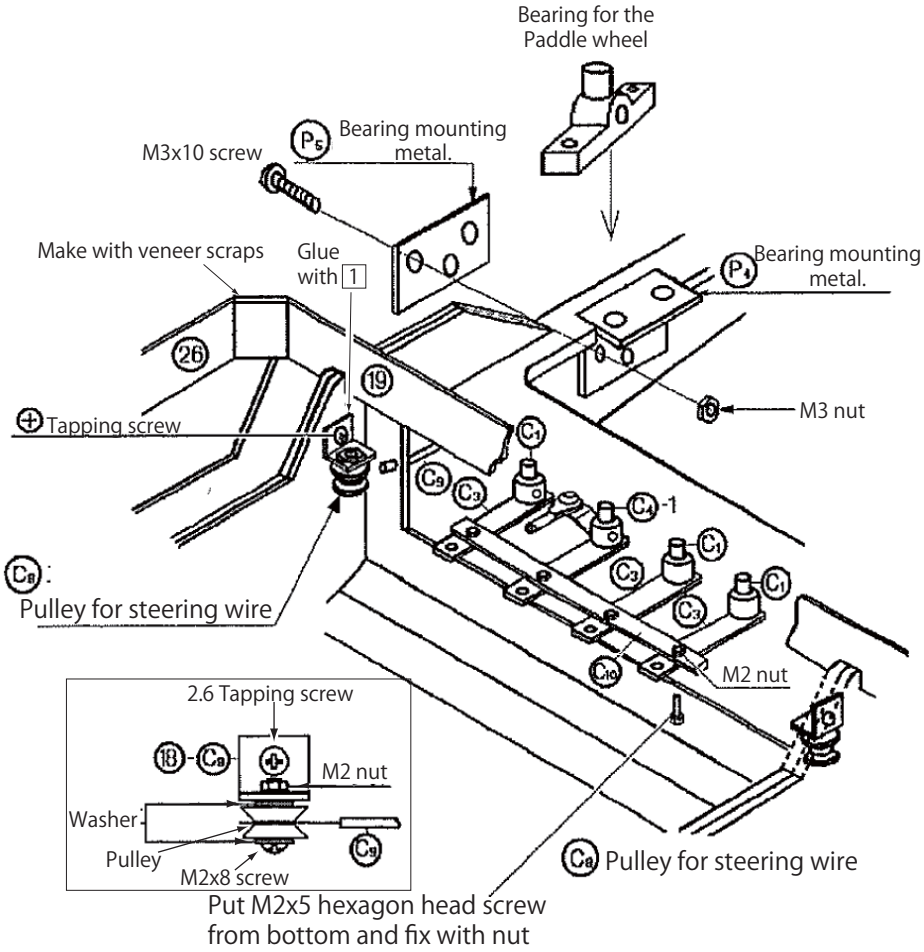


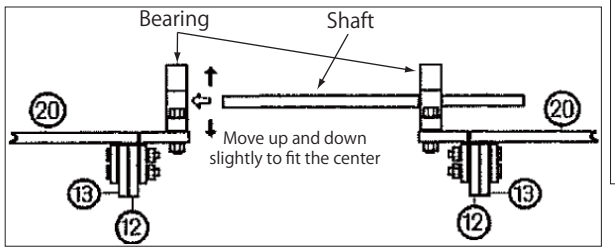


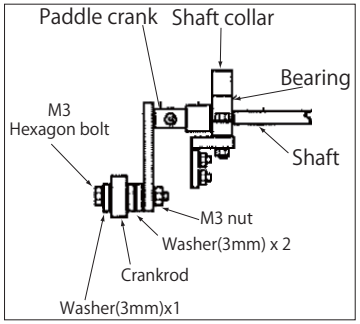
[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

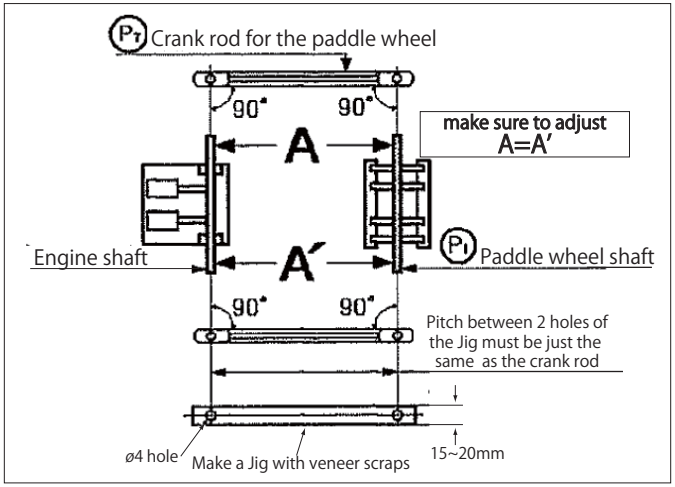
ASSEMBLING 6

- 2 pulleys for steering wheel should be mounted on both sides using tapping screws. Install the bearing mounting metal Ⓟ4 , Ⓟ5 on the frame using cross-recessed head machine screws M3x10 and nuts.
- Install the engine, etc., tentatively referring to the equipment mounting instruction drawing, before painting.
- When installing the engine, the paddle wheel should be mounted on the bearing precisely. The paddle wheel shaft and the engine shaft must be parallel to each other.
- Use the jig (rod) to adjust the position. Mount the crank on the shaft, and connect it with the rod. Confirm that it turns smoothly.





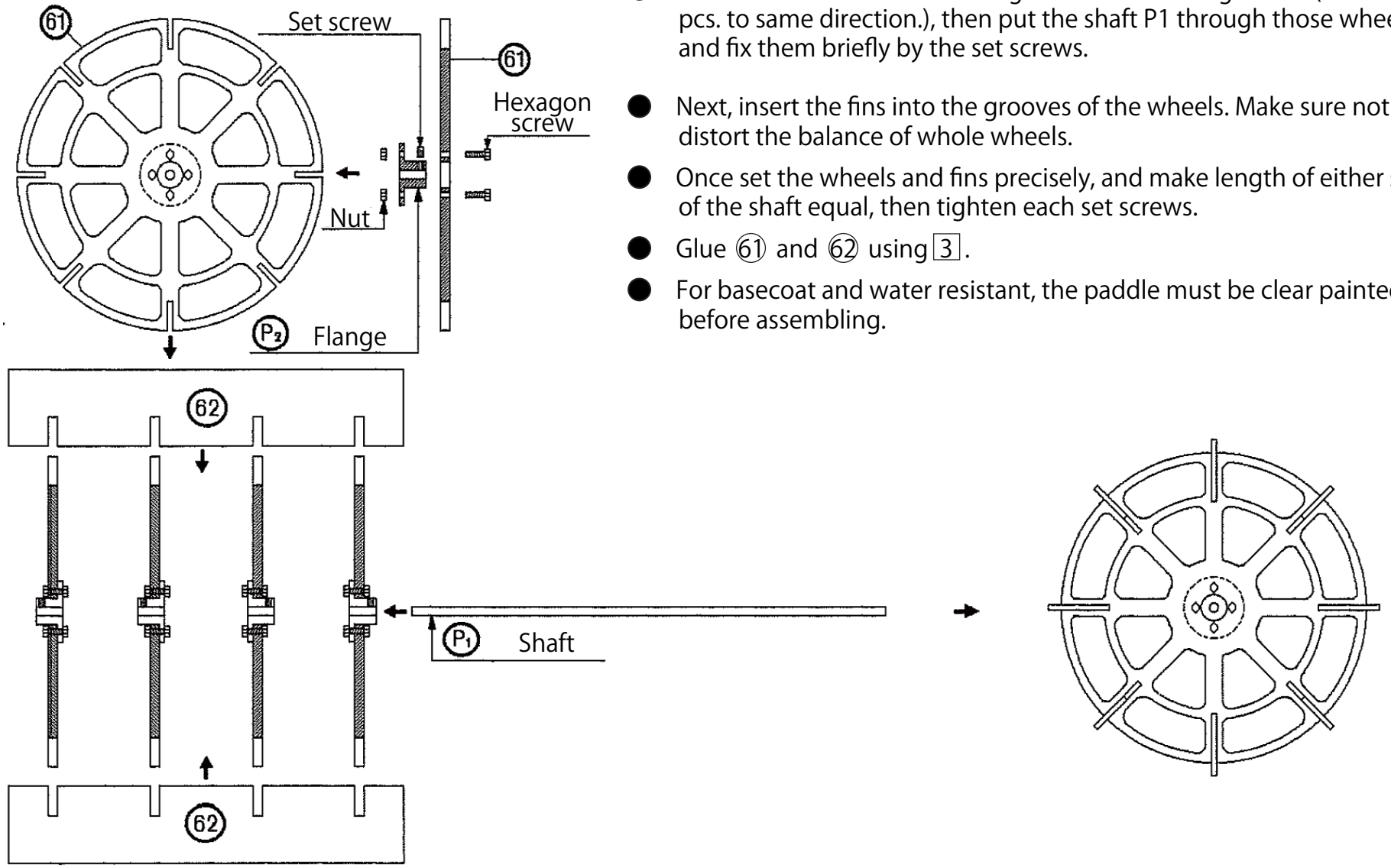




1 Instant adhesive 2 5-minute Epoxy adhesive 3 30-minute Epoxy adhesive 4 6-hour Epoxy adhesive

ASSEMBLING 7

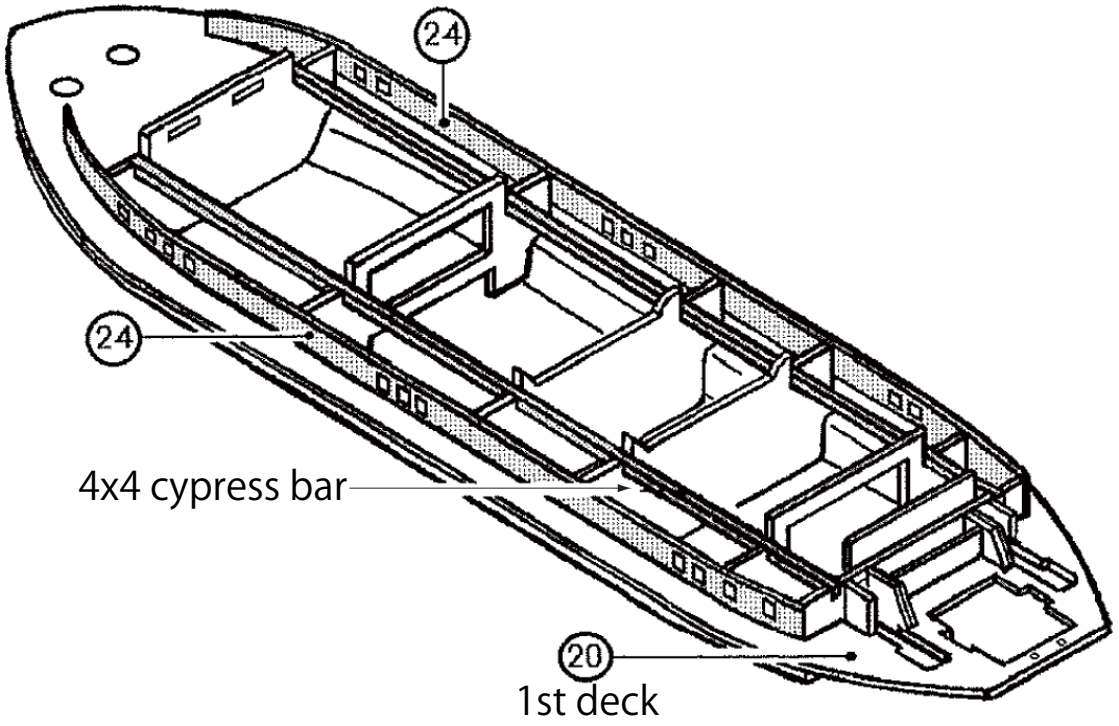
- To assemble the paddle wheel, first put the flange Ⓟ2 into the wheel ⑥① , and fix them by hexagon bolts and nuts.
- Set 4 the assembled wheels aligned as the drawing shows (set each 2 pcs. to same direction.), then put the shaft P1 through those wheels and fix them briefly by the set screws.
- Next, insert the fins into the grooves of the wheels. Make sure not to distort the balance of whole wheels.
- Once set the wheels and fins precisely, and make length of either side of the shaft equal, then tighten each set screws.
- Glue ⑥① and ⑥② using [3].
- For basecoat and water resistant, the paddle must be clear painted before assembling.

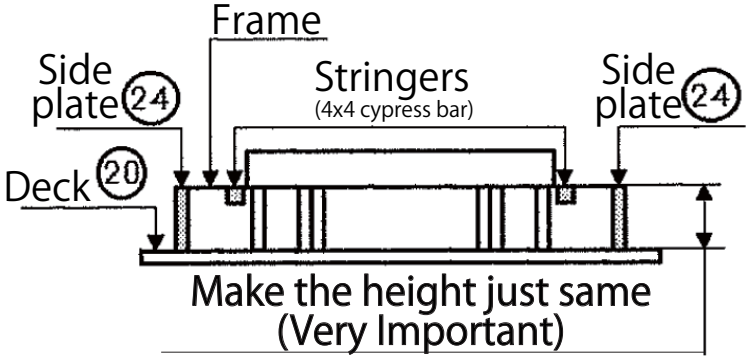


ASSEMBLING 8

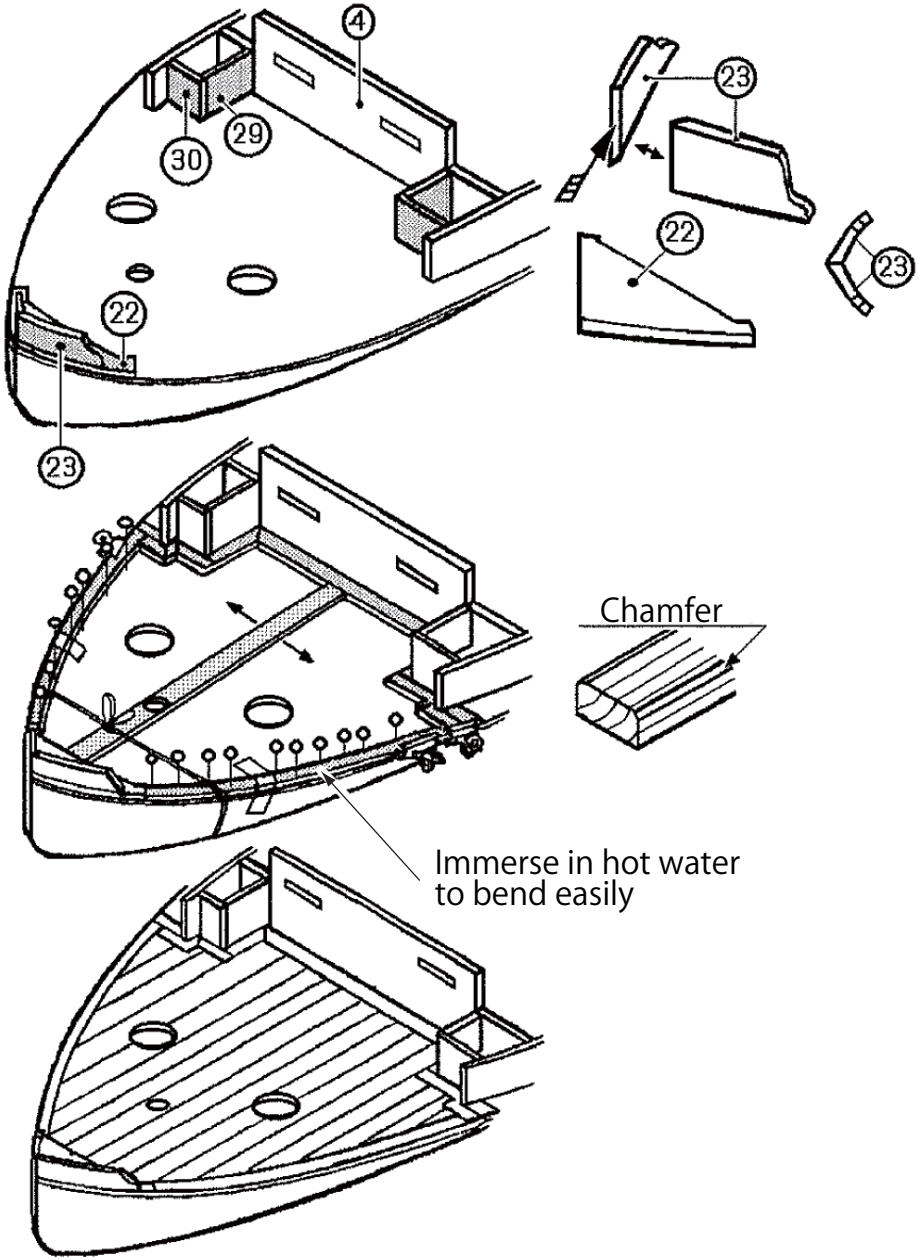
- As the drawing shows, glue the side plates ㉔ with each frames and deck ⑳ using [1] and [2].
- Put the stringers made by 4x4 cypress bar into the grooves of each frames and glue them using [1] and [2].

※Make sure to set the level of top surfaces of each frames, side plates ㉔ , stringers all the same before gluing.
If they aren't same, then adjust by deepening the grooves.





ASSEMBLING 9



- Make the arrow-marked surfaces of ㉓ oblique, and glue the parts together using [1], [2]. The joined part is then glued on the bow. Glue ㉙ and ㉚ as well.

- Cut out the deck material 1.5x6x600 and paste it on the bow. To do this, first paste the peripheral part along the frames ②, ㉙ , ㉚ , and 22 using [1], [2].

※The sharp corners are recommended to be immersed in hot water, to make it easy to bend before pasting. Until adhesive stiffen, temporally fixing by some clips, tape, and strings is recommended. Pins may be used to keep the material in position.

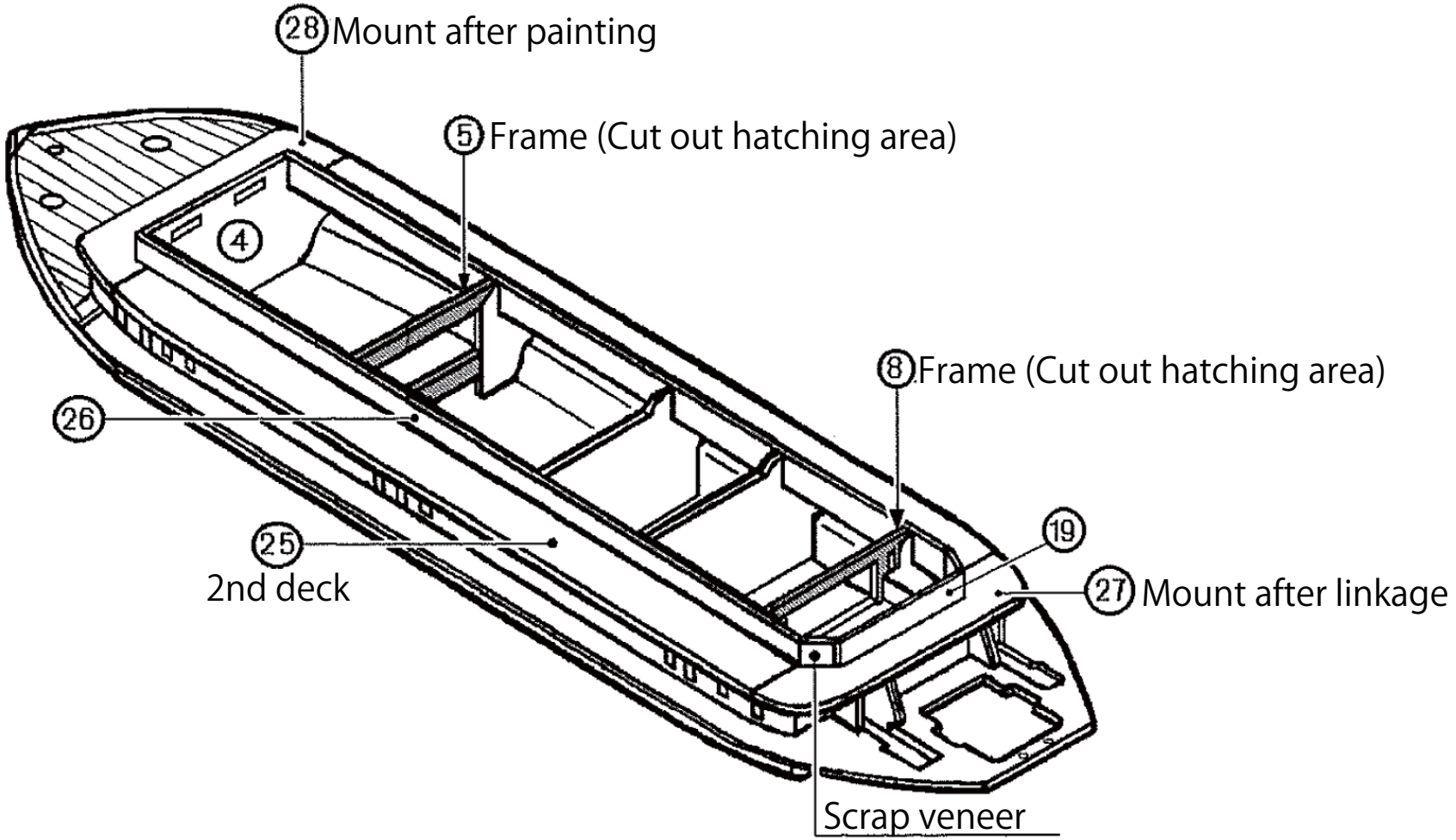
- After pasting the periphery, paste the deck material starting from center and extend to either side. During pasting, drill holes for the ventilator and mast.

※As the drawing shows, the top surfaces of each deck materials recommended to be chamfered. Because of the chamfer, the deck becomes sharp and beautiful after painting.

- Paint the deck and apply masking to them prior to starting the full painting.

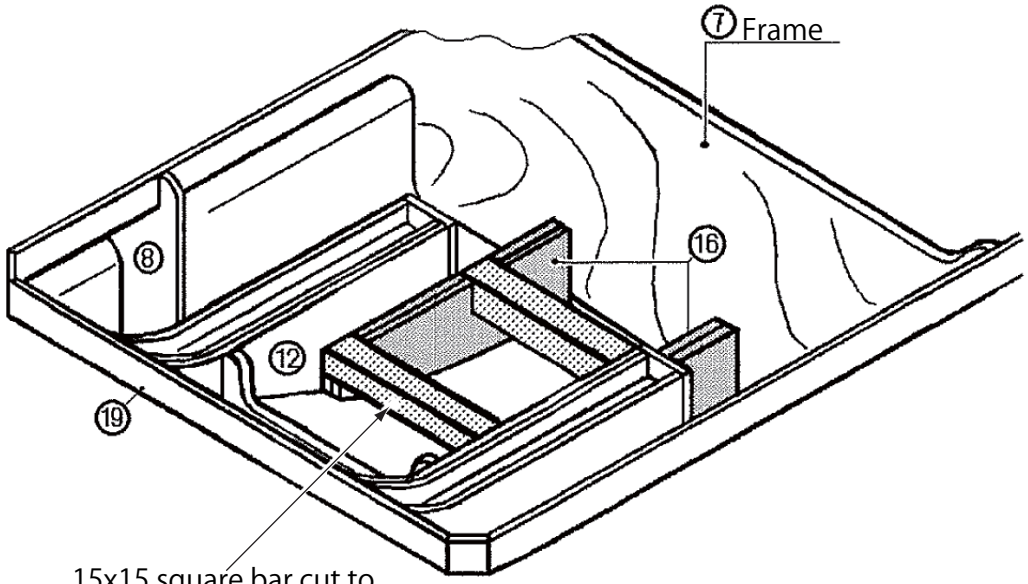
ASSEMBLING 10

- Mount and glue 2nd deck ㉕ , ㉖ on either side using 1 , 2 .
- Glue scrap veneers on either rear corners of ㉖ to combine ⑲ .
- Paint the under surface of ㉘ and glue using 1 , 2 .
- After adhesive stiffen, cut out the hatching area of each frames.

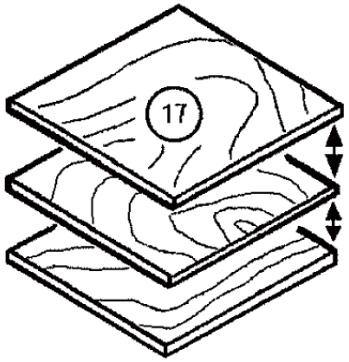


1 Instant adhesive 2 5-minute Epoxy adhesive 3 30-minute Epoxy adhesive 4 6-hour Epoxy adhesive

ASSEMBLING 11



15x15 square bar cut to
about 122mm in length
on which the engine bed will mount



- Two sheets of ⑯ are prepared by gluing using [2], [3], and are glued to either side of the inside of ⑫ , and frame ⑦ using [2], [3].
- Two cypress square bars 15x15 cut to about 122mm lengths are placed into the grooves of ⑯ and glue them using [2], [3].
- 3 pieces of ⑰ are pasted together, to make an engine bed using [2], [3].
- The engine bed ⑰ is mounted on 15x15 cypress square bars by 4 tapping screws, therefore do not glue it at the moment.

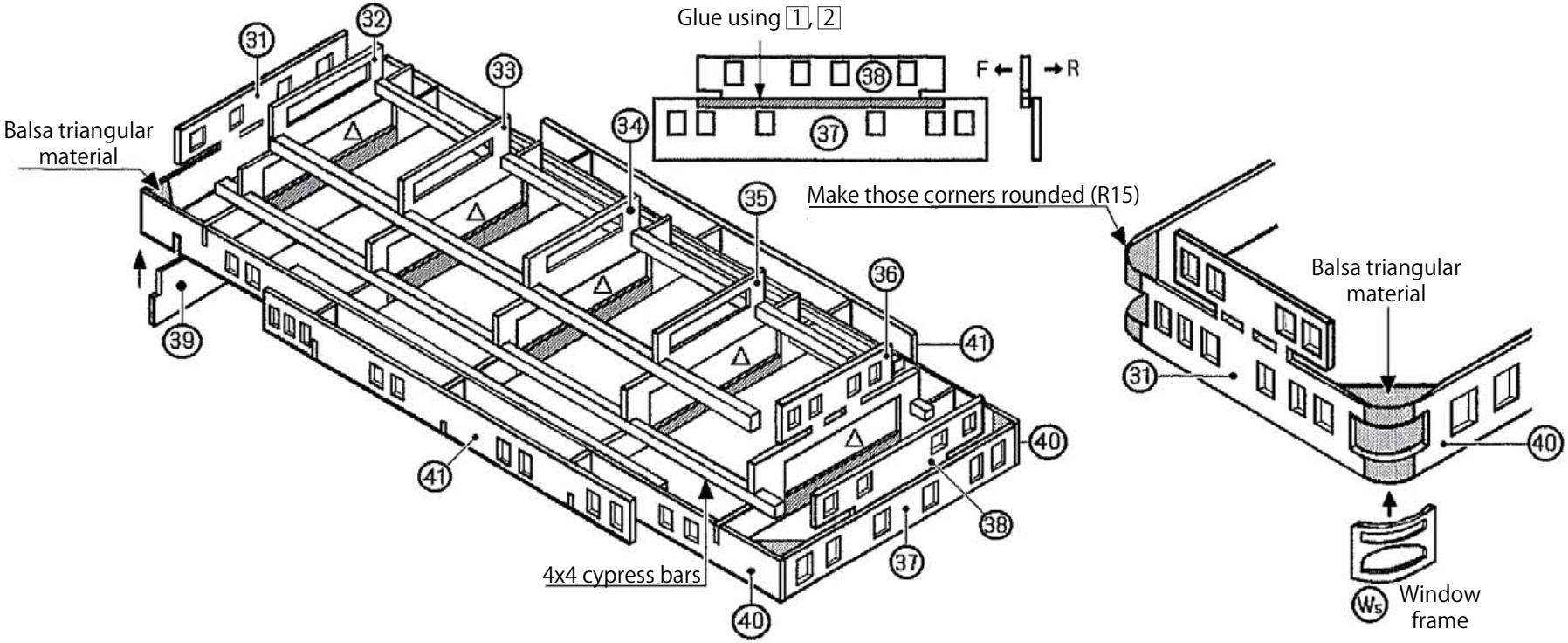
※ The bottom of the ship has now been tentatively completed.

※ Fill each clearance between frames and FRP hull with epoxy adhesive. Die-cut parts should be touched with woodworking or epoxy putty.

※ ⑧ in the left drawing shows the shape of after cutting frame.

ASSEMBLING 12

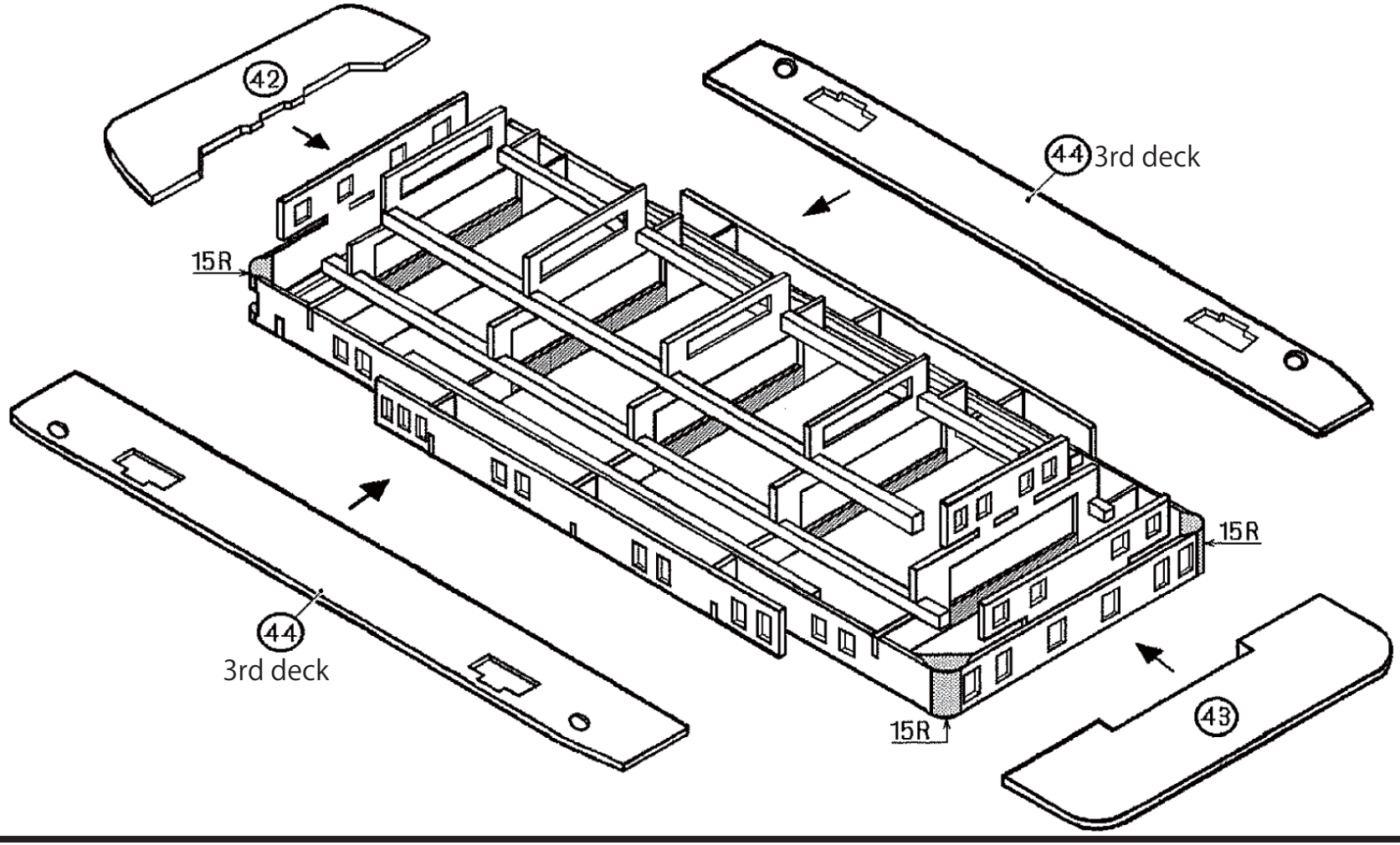
- Glue ㉛ , ㉜ , ㉝ , ㉞ , ㉟ , ㊱ , ㊲ to the side plates ㊵ using [1] or [2].
- Glue ㊳ to the top inside of ㊲ as the drawing shows using [1], [2].
- Glue the balsa triangular material to corners using [1], [2].
- Cut 4x4 cypress bars to the appropriate length and glue them as the drawing shows using [1], [2].
- Place ㊴ from below in the middle part of the frames ㉛ and ㉜ and glue them using [1], [2].
- Paste ㊶ on both sides using [1], [2].
- Cut out the hatching area of each frames (△marked area) after complete assembling.
- After assembling the frames, make each corners built of triangular materials round as the drawing shows (approx. R15) using file and sanding papers.
- After that, cut openings for the window frames Ⓦ5 at the rounded corners.



[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

ASSEMBLING 13

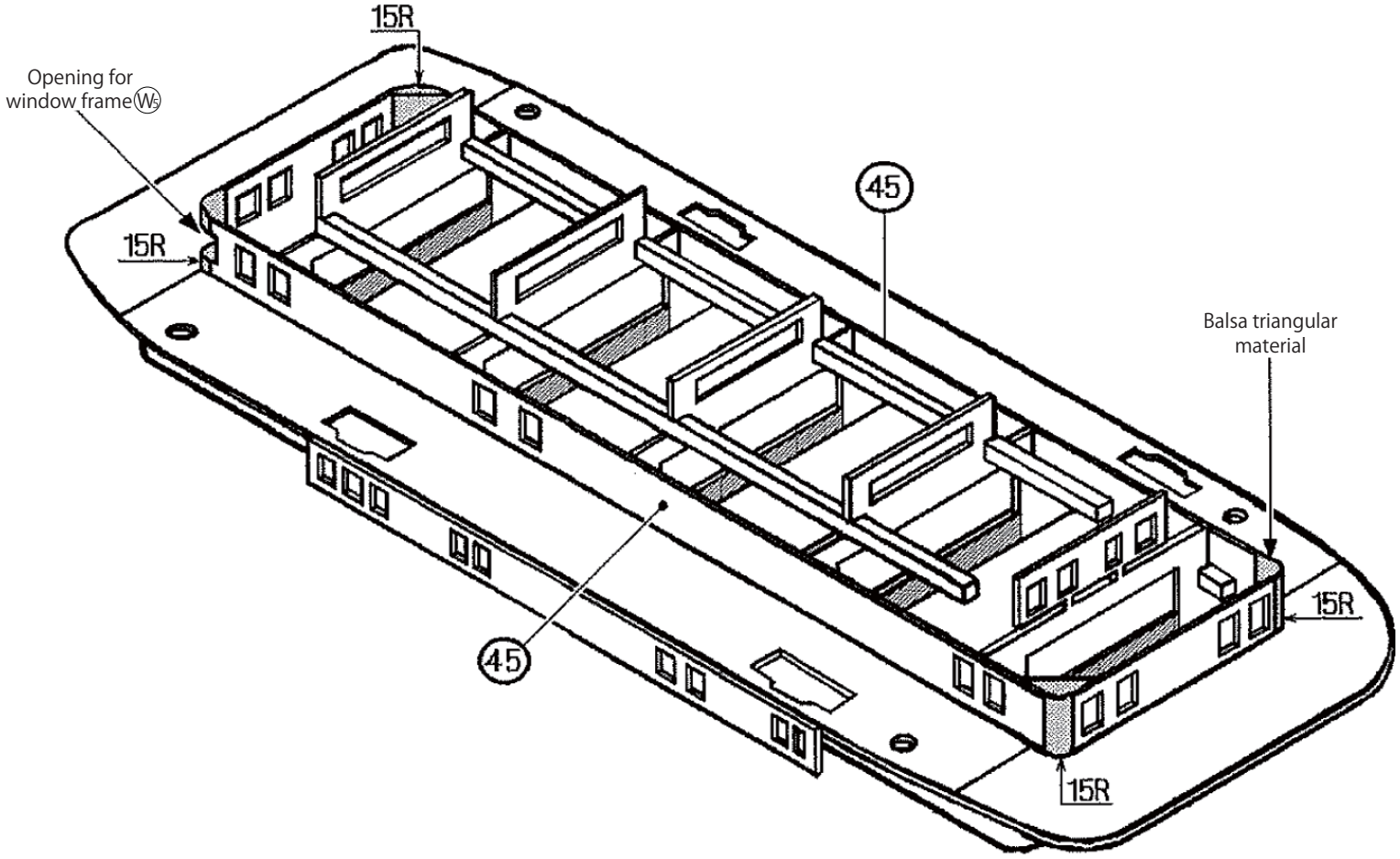
- Glue the deck plates ㊷ , ㊸ , ㊹ (3rd deck) as the drawing shows using [1] , [2].
- Part ㊹ is bent backward; it may be necessary to hold it in position tentatively with the clips or tapes.



[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

ASSEMBLING 14

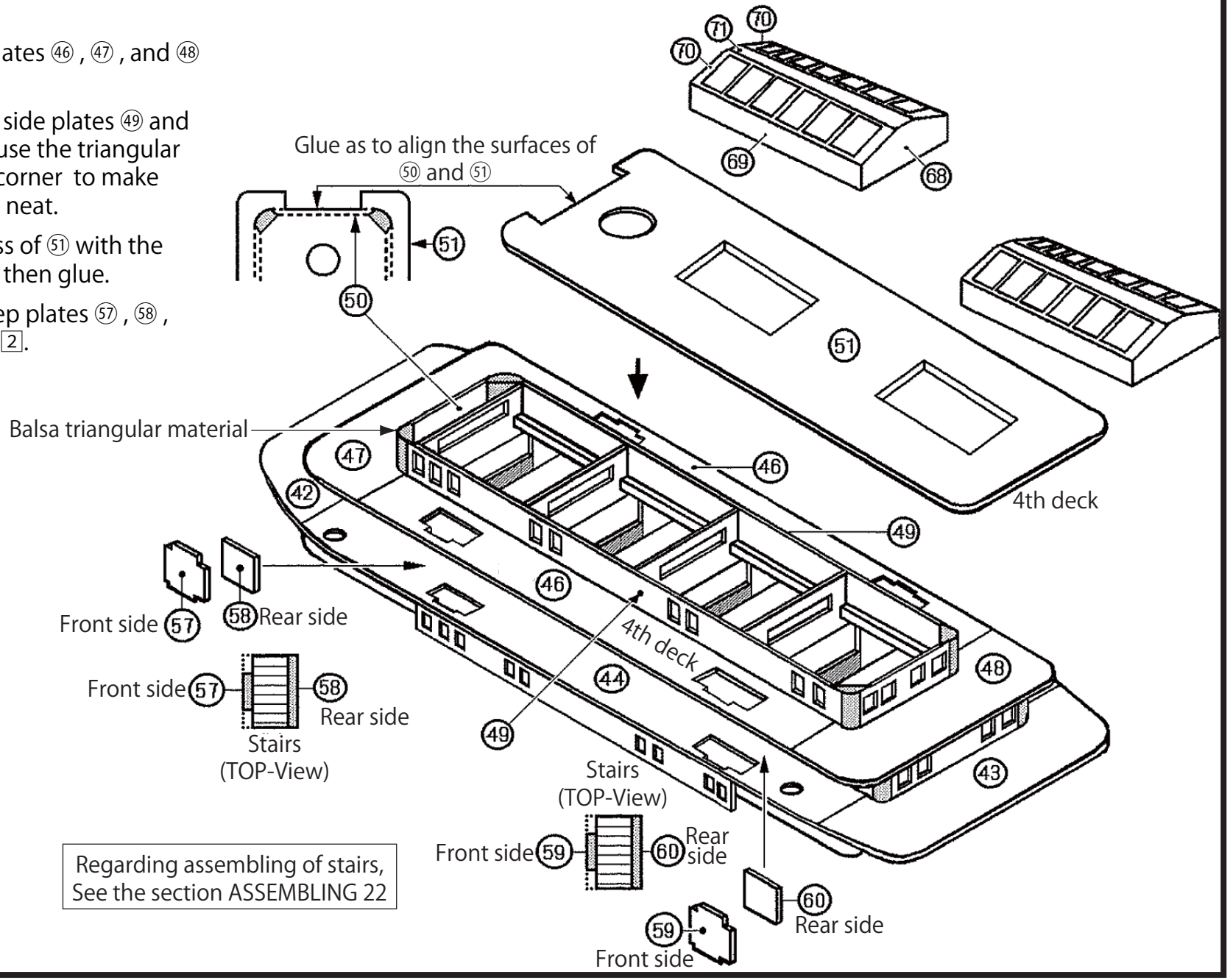
- Glue the side plates ㊺ on both sides, and glue the balsa triangular material on the corners using 1 or 2 .
- Round the corners to R15 and cut out openings for the wihdow frames Ⓦ5 in the same way as ASSEMBLING 12.



1 Instant adhesive 2 5-minute Epoxy adhesive 3 30-minute Epoxy adhesive 4 6-hour Epoxy adhesive

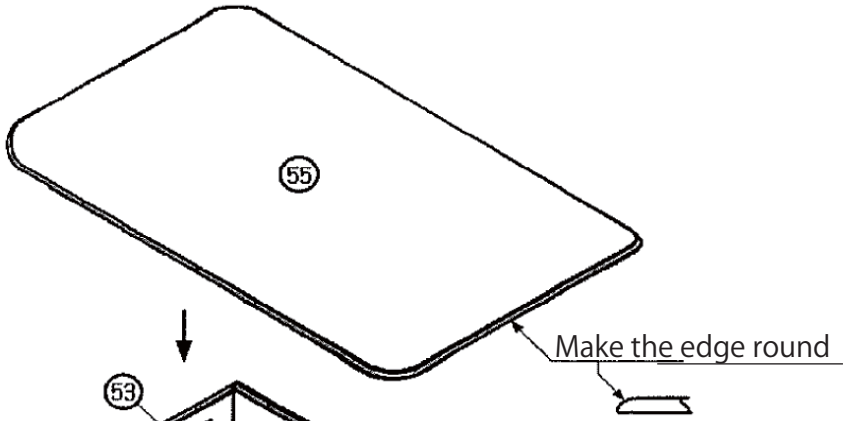
ASSEMBLING 15

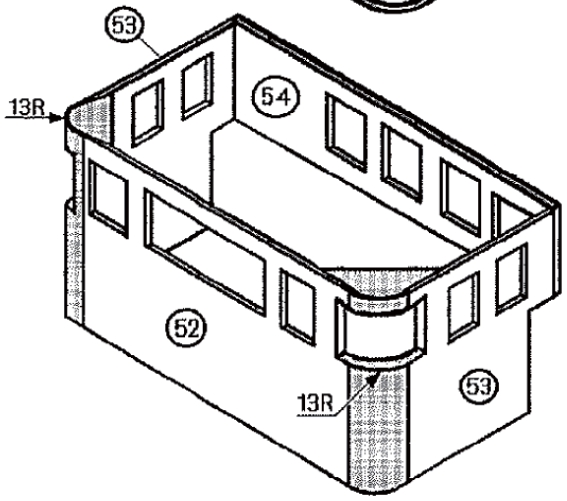
- Glue the deck plates ㊻ , ㊼ , and ㊽ using [1] , [2] .
- After gluing the side plates ㊾ and ㊿ using [1] , [2], use the triangular material on the corner to make them round and neat.
- Match the recess of (51) with the front of ㊿ , and then glue.
- Glue the side step plates (57) , (58) , (59) , (60) using [1] , [2].

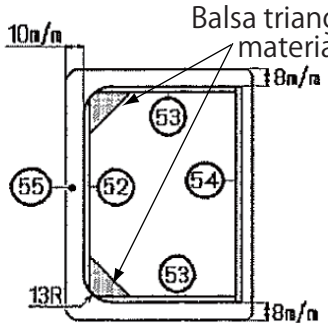


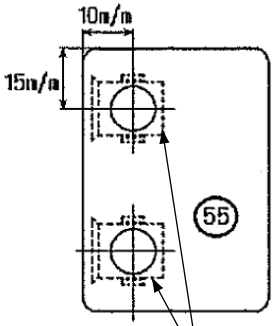
[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

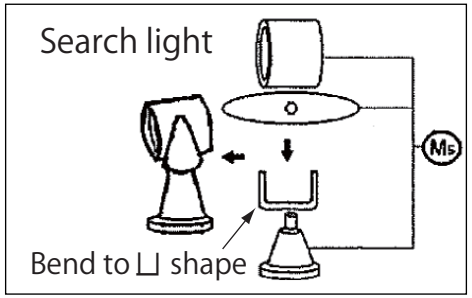
ASSEMBLING 16

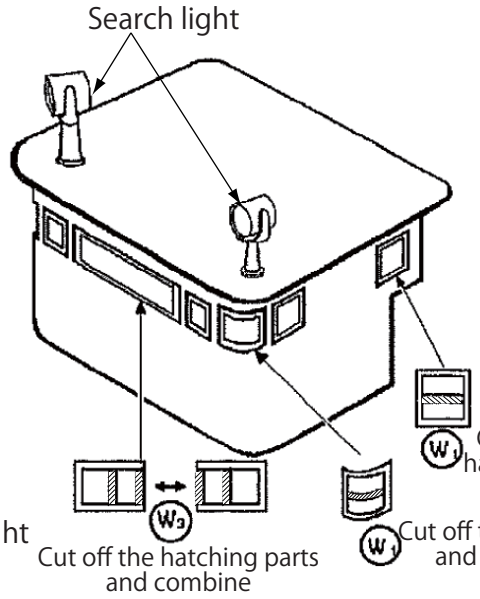


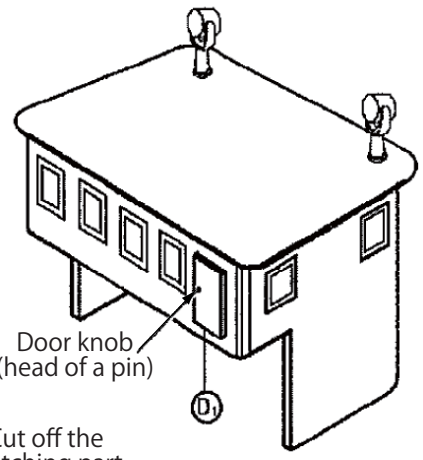












- Glue the bridges ㊿, ㊸, and ㊹ using [1], [2].
- Glue balsa triangular material on the corners using [1], [2].
- After drying, make the corners rounded (approx. R13). after that, cut openings for the windows at the rounded corners.
- Finally, glue the roof ㊺ using [1], [2] referring to the drawing.
- For the bridge, use the window frames W1 and W3 partly cut as the drawing shows.

※When cut the hatching parts of Ⓦ1 and Ⓦ3, use a hand saw not a nipper to avoid any distortion of the material.

- Make 4 pcs. of the search light referring to the drawing. Paste 2pcs. to the roof of the bridge in the position drawing shows.

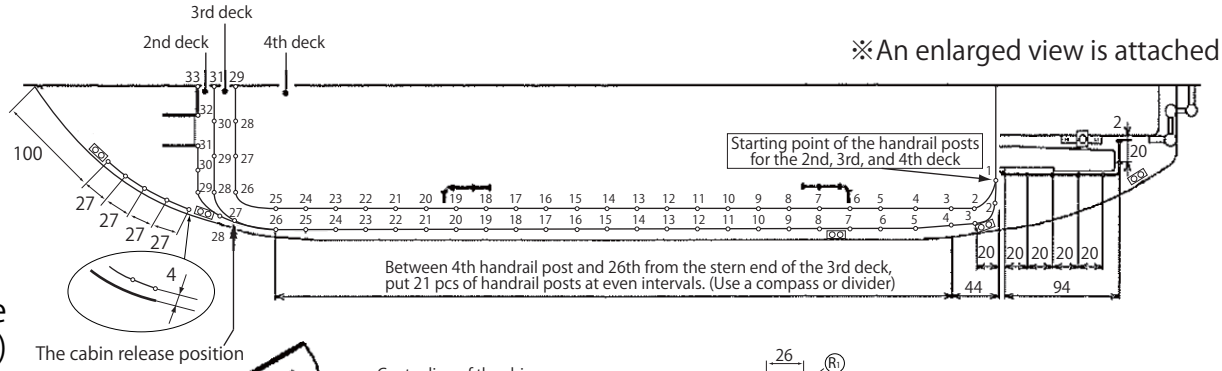
※Pasting the search lights can be done later.

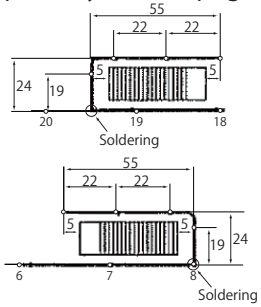
[1] **Instant adhesive** [2] **5-minute Epoxy adhesive** [3] **30-minute Epoxy adhesive** [4] **6-hour Epoxy adhesive**

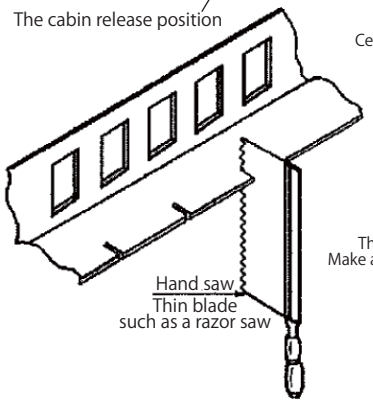
ASSEMBLING 17

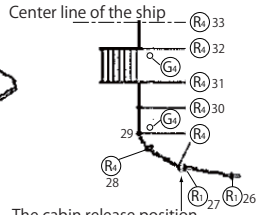
- See this page and next page carefully before assembling handrails.
- Make the grooves to insert the handrail posts using hand saw. (Adjust the depth of the grooves to the width of the handrail posts)
- At the curve of the corners, adjust the interval of the handrail posts adequately.
- Make the grooves carefully in order to align the post positions of each 3 decks.
- Painting the cabin prior to attaching the handrail wires is recommended.
- Mount the cabin house on the body of the ship, and glue it to the grooves with [1] after confirming that the lower edges of the handrail posts R1 have been surely placed on the deck.
- The handrail posts R2 are tentatively inserted into the grooves to determine the position where to drill Ø0.8 holes. Drill the holes and then glue with [1].

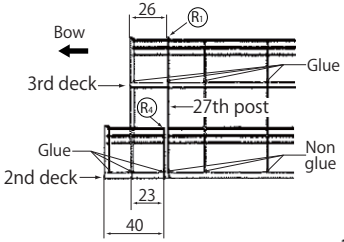
※An enlarged view is attached separately for this page.

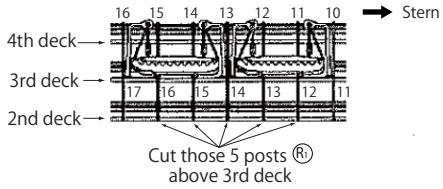


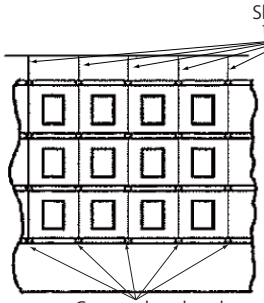


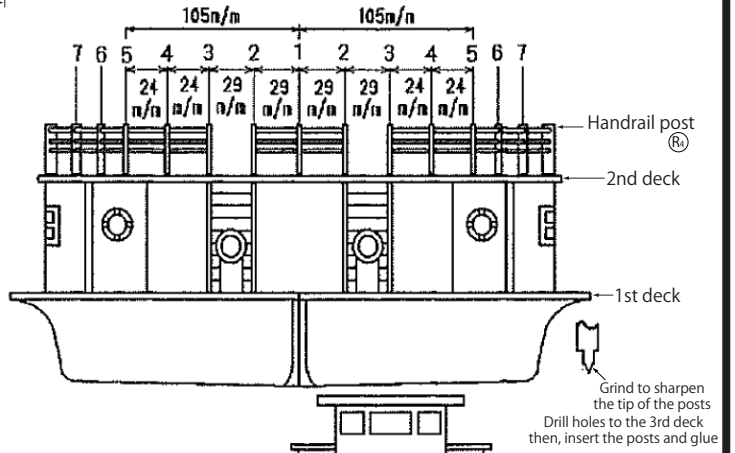


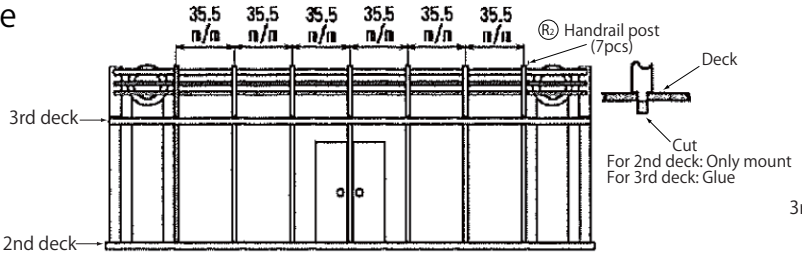


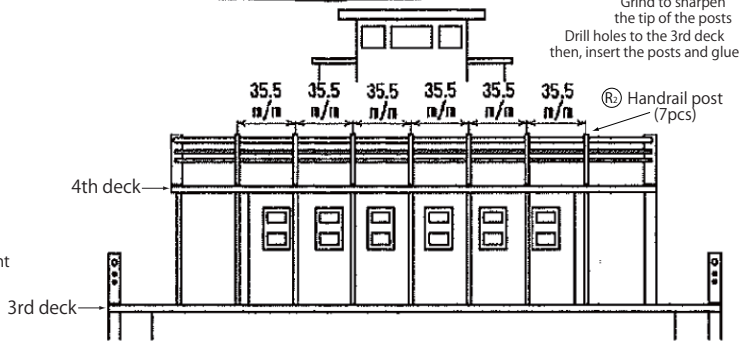




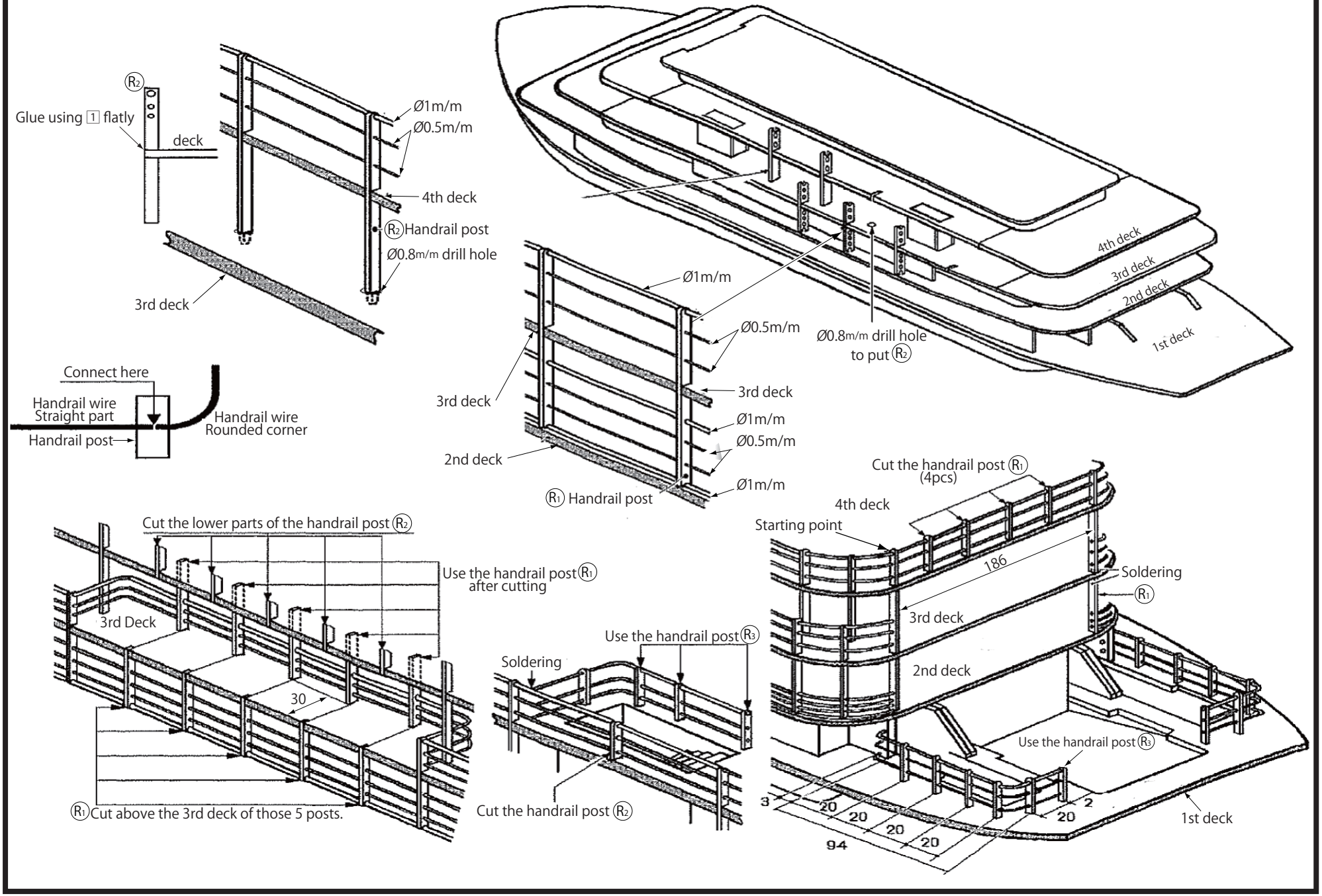








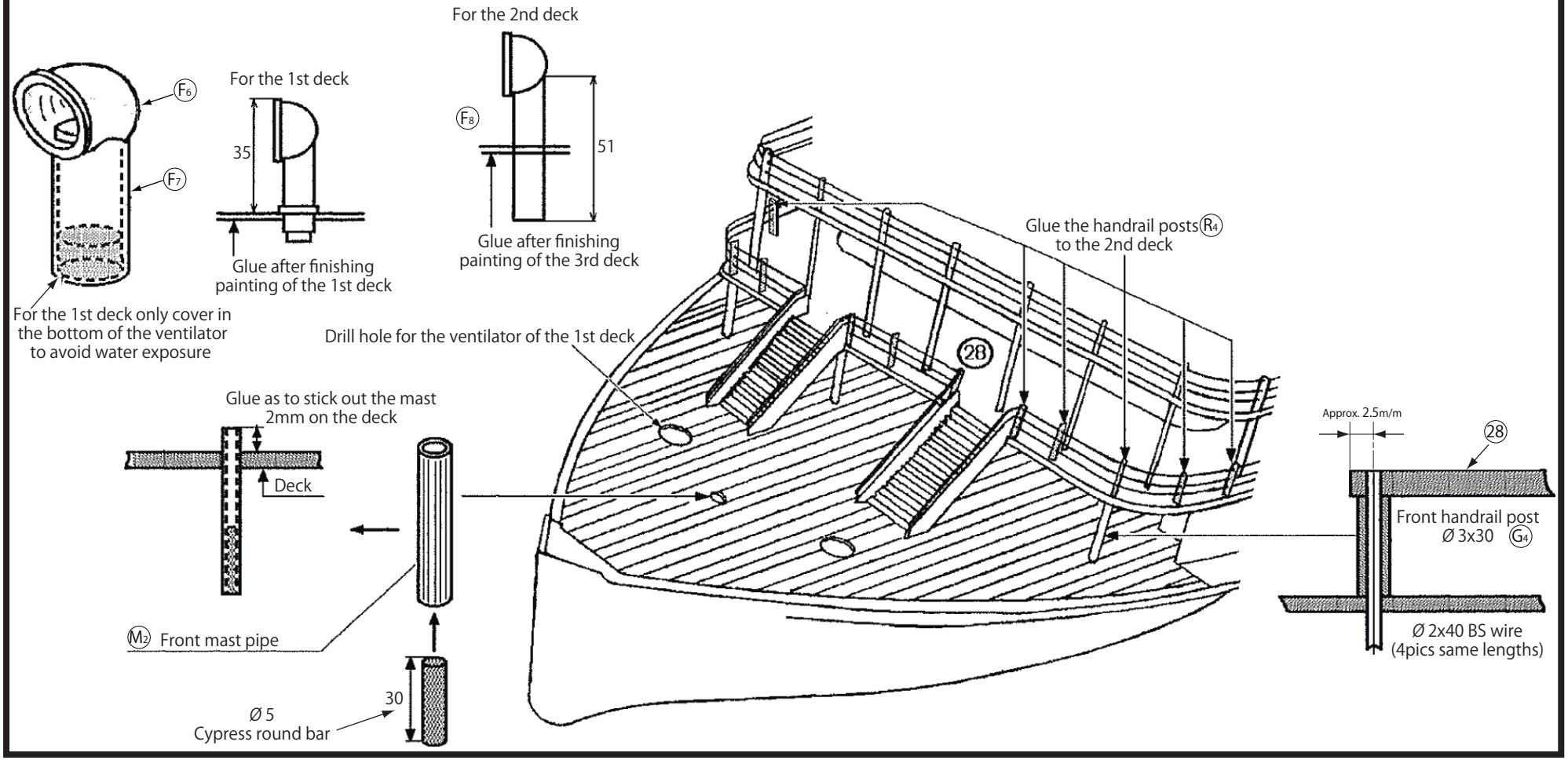
[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive



1 Instant adhesive 2 5-minute Epoxy adhesive 3 30-minute Epoxy adhesive 4 6-hour Epoxy adhesive

ASSEMBLING 18

- 4 front deck post pipes Ⓖ4 are mounted as the drawing shows. To do this, drill Ø 2 holes on ㉘, by referring th the position of the handrail posts, and then install the post pipes vertically on the deck. With the pipe as a guide, drill Ø2 holes through the deck from ㉘.
- Ø 2 BS wire is glued to the pipe with [1], while the upper end is matched to ㉘.
- Glue the Ø 5 cypress round bar to the bottom of the mast pipe with [1], and then to the bottom of the ship with [2]. At this moment, stick out the mast pipe 2mm on the deck.



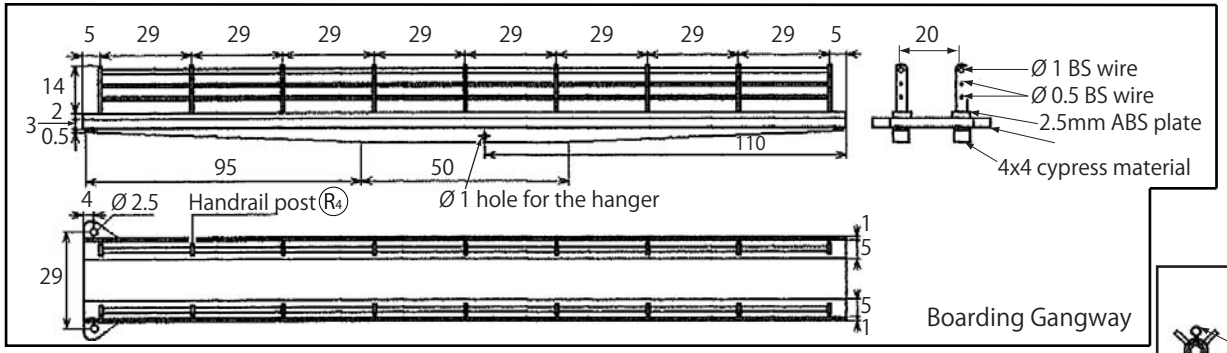
[1] Instant adhesive [2] 5-minute Epoxy adhesive [3] 30-minute Epoxy adhesive [4] 6-hour Epoxy adhesive

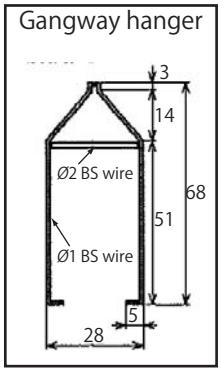
ASSEMBLING 19

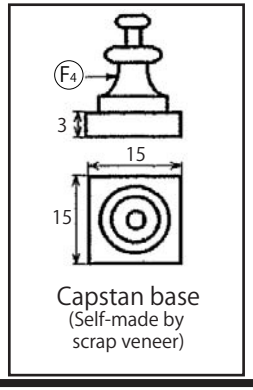
- The parts regarding the boarding gangway should be assembled separately. After that, those are attached to the deck as the following page shows.

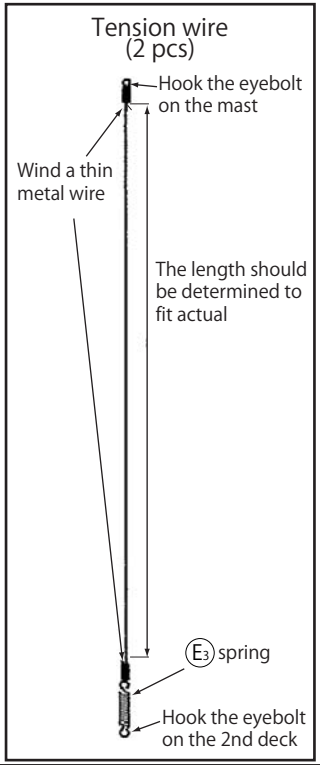
Each length:

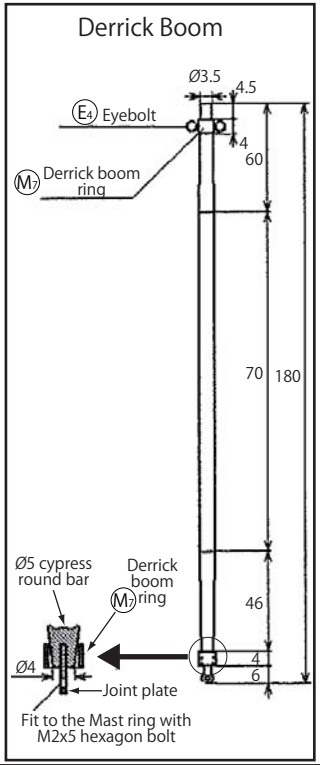
- Derrick boom ···180mm
- Mast guide arm ···210mm x 2pcs
- Mast ···270mm
- Front mast pipe ···30mm

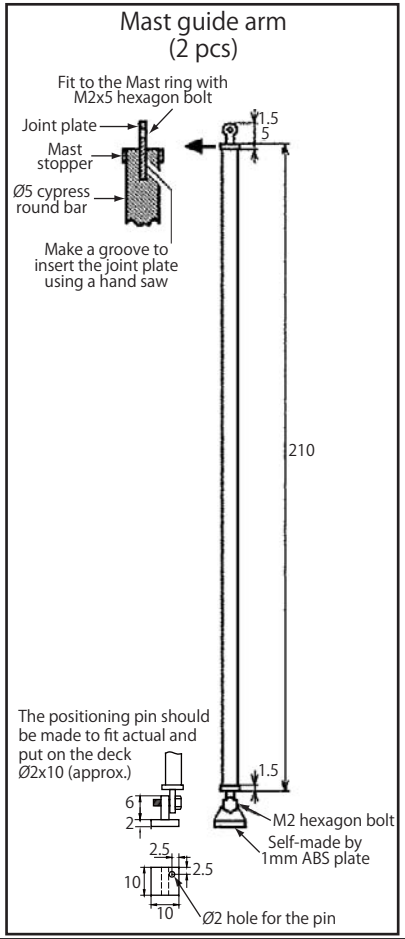


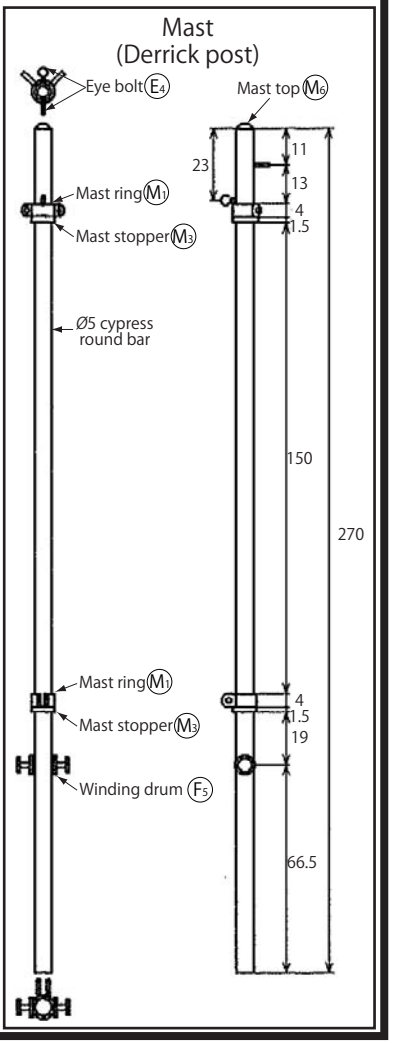






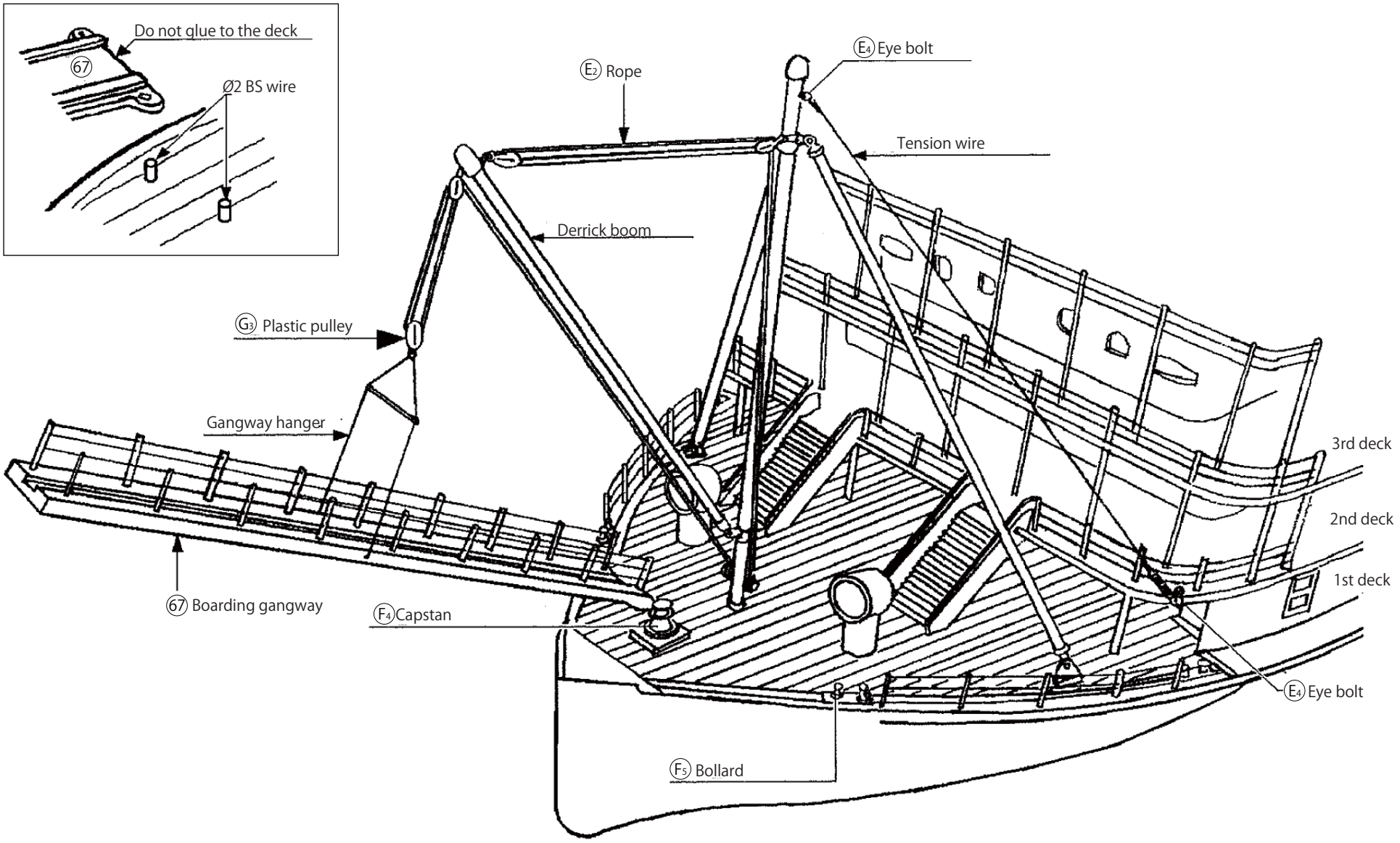






ASSEMBLING 20

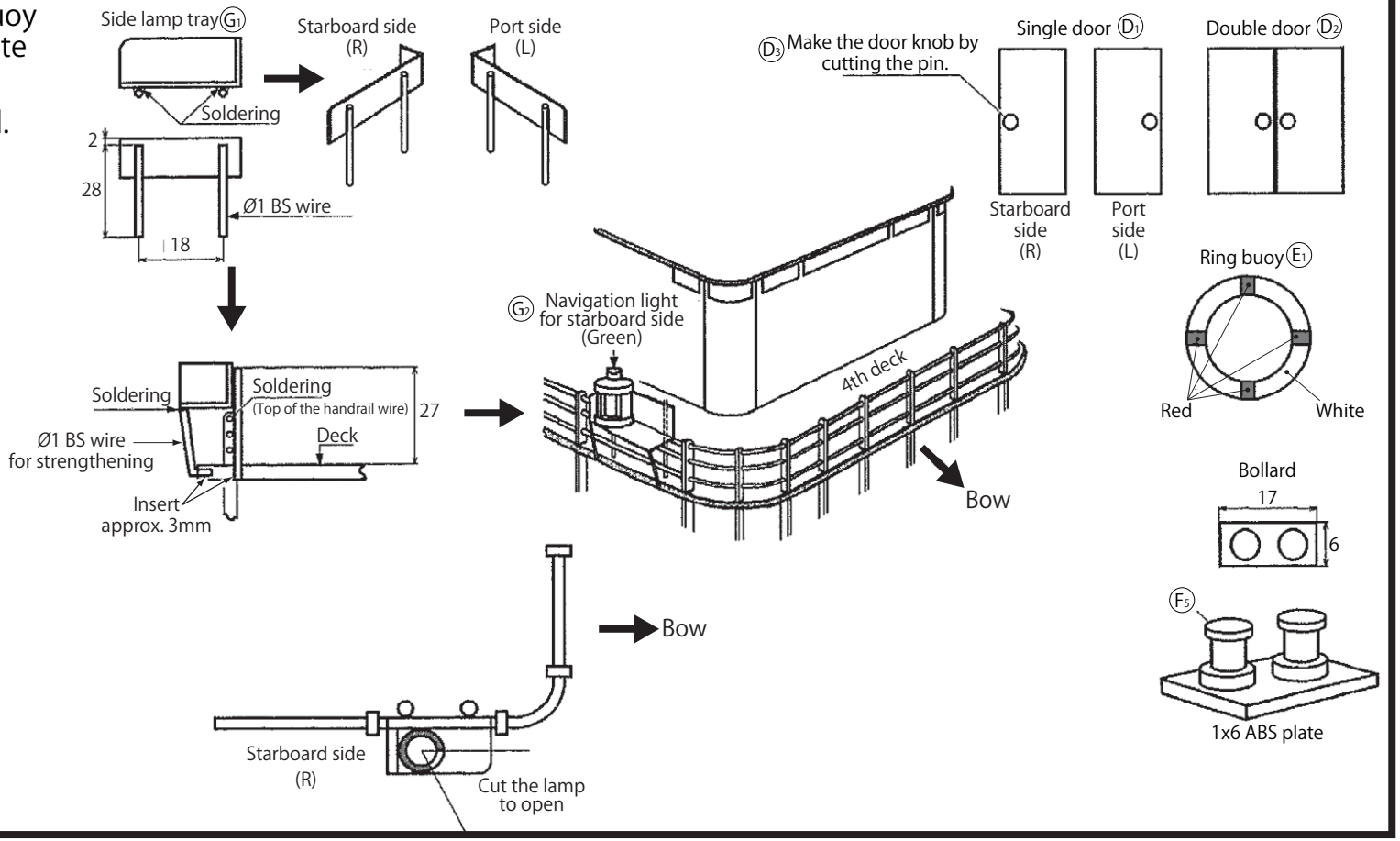
- Attach the parts that were made at the previous page to the deck as the drawing shows.



1 Instant adhesive 2 5-minute Epoxy adhesive 3 30-minute Epoxy adhesive 4 6-hour Epoxy adhesive

ASSEMBLING 21

- Cut Ø1 BS wire to the length of 27mm and solder them to both side of the side lamp trays as their legs.
- Drill Ø1 holes on the deck and insert the trays in the holes as the drawing shows.
- Next, solder the legs of the trays with the top handrail wire to fix the tray.
- For further strengthening, solder Ø1 BS wires to the both corner edge of the tray, and drill Ø1 holes on the side surface of the deck to insert the Ø1 BS wires from the tray.
- Attach the navigation lights. The Green one is for the starboard side (Right), and the Red one is for the port side (Left).
- There are 2 types of doors, single and double swing types. For each side, the direction of opening the doors should be opposite. Make the door knob by cutting the pin.
- Make 12 pcs of the ring buoy by painting the O-ring white and 4 parts red crosswise.
- Make 12 pcs of the bollard.



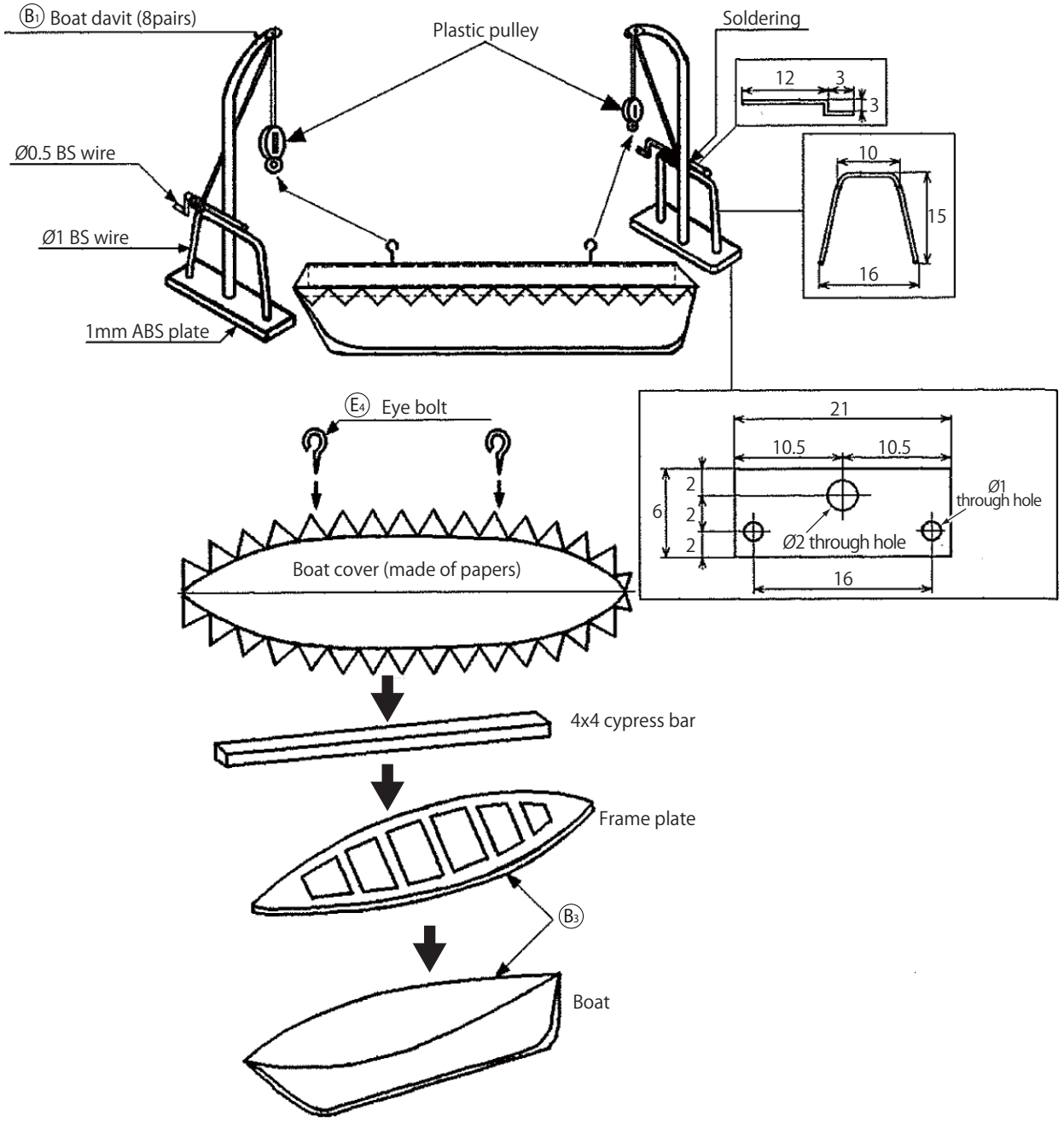
1 Instant adhesive 2 5-minute Epoxy adhesive 3 30-minute Epoxy adhesive 4 6-hour Epoxy adhesive

ASSEMBLING 22

- Make 4 pcs of the life boat as the drawing shows. First, glue the frame plate to the boat. Next glue 4x4 cypress bar with it and glue the cover. Finally, screw the eye bolts on both side of the life boat and apply adhesive.

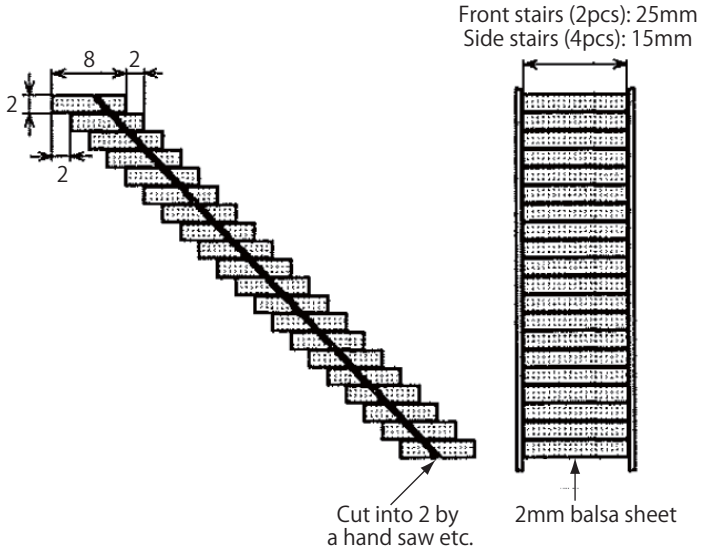
※To make the boat cover, put the boat on the paper to model its shape. Paper such as a memo pad is adequate. Cut the rim of the paper to make it zigzag.
And for water proof, paint the paper previously.

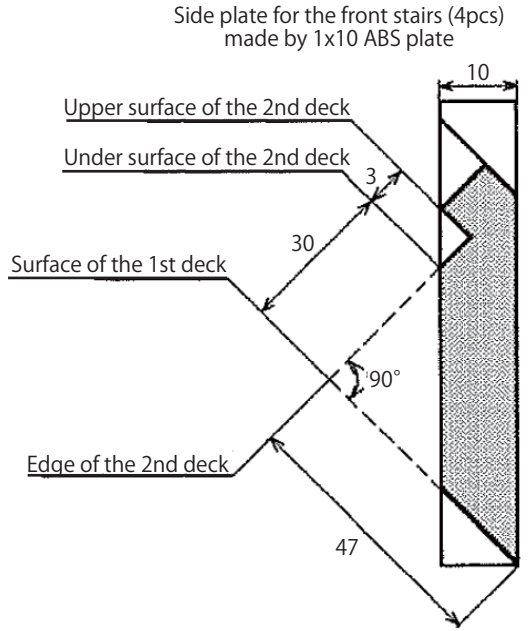
- Make 8 pairs of the boat davit referring to the dimensions as shown.



ASSEMBLING 23

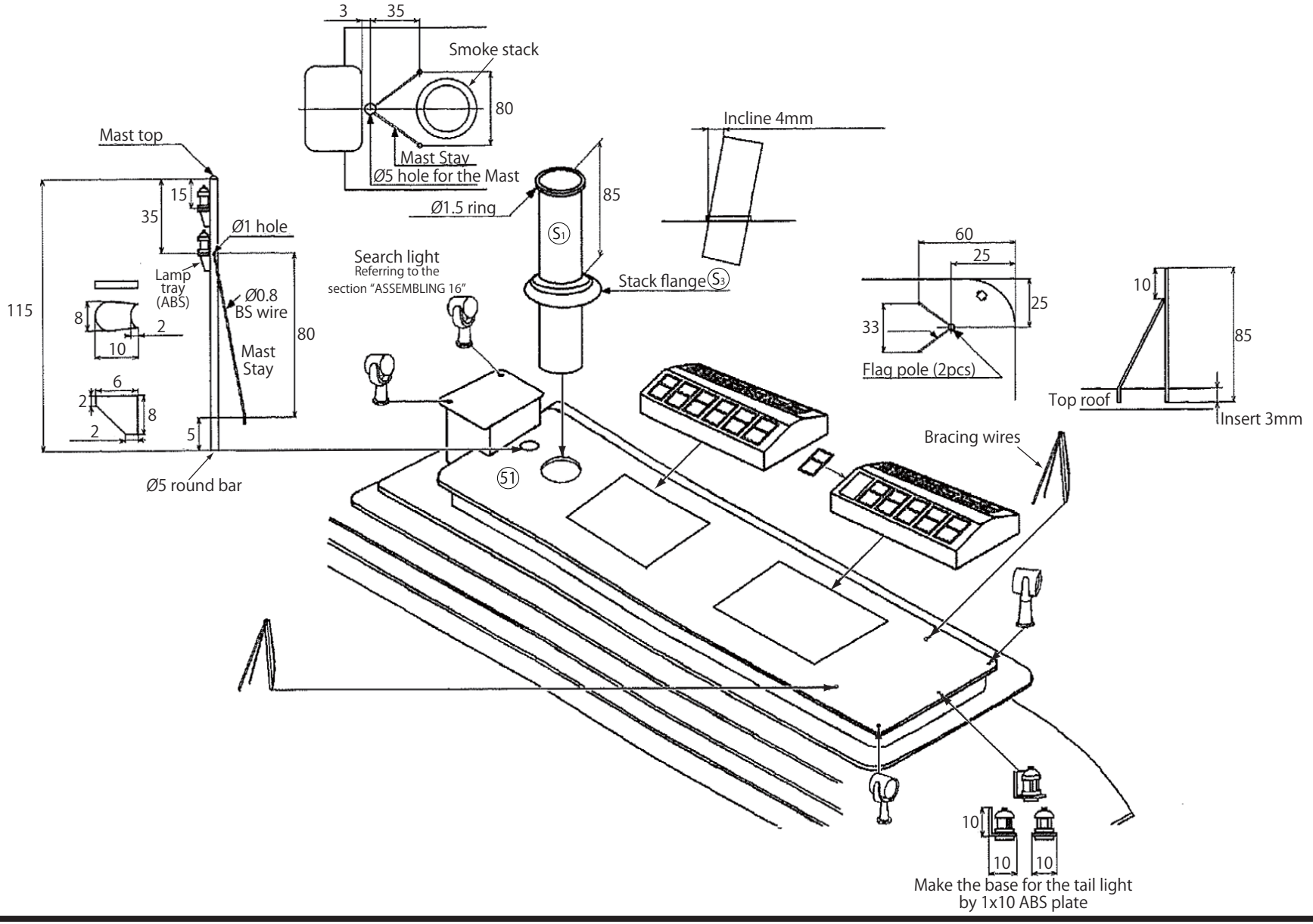
- Make 2 pcs of the front stairs and 4 pcs of the side stairs. Use the balsa sheet which is 2mm thick and 8mm wide. Cut the sheet to the length of 25mm for the front ones, and 15mm for the side ones as many as needed.
- As the drawing shows, glue the cut balsa sheets to make them stick out about 2mm each other. Make those assemblies 1pc for the front, and 2pcs for the side each.
- Cut the assemblies into 2 by a hand saw. Then, there are 2 pcs of the front stairs and 4 pcs of the side stairs.
- Glue the side stairs to the 3rd deck. For the 2nd deck, do not glue but only insert.
- For the front stairs, cut out the side plates as the drawing shows by 10x1 ABS plate and glue them to the ship after assembling the stairs. (fit to the actual sizes.)





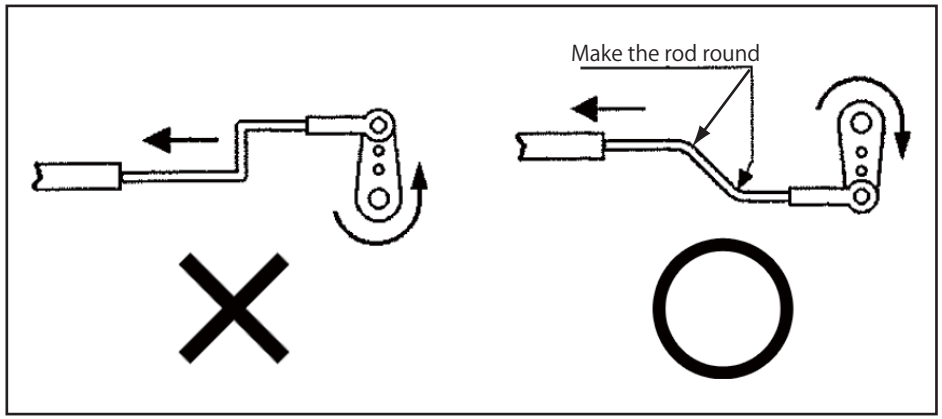
ASSEMBLING 24

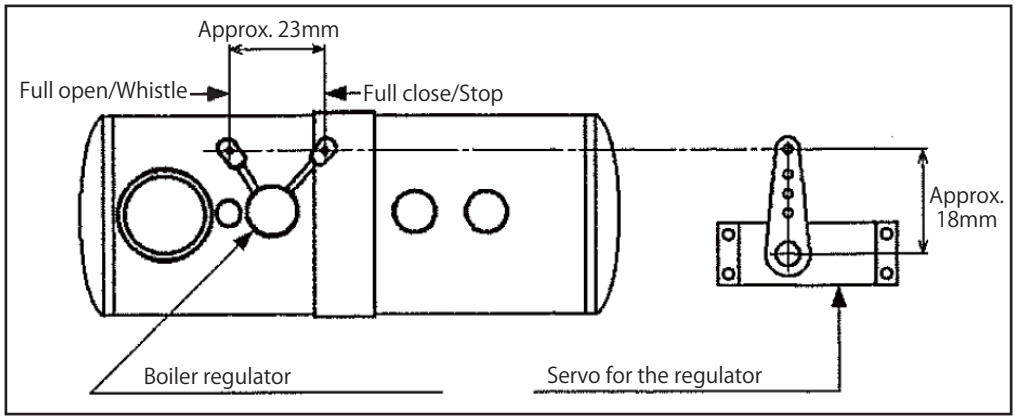
- Mount the small fittings referring the the drawing. (Mount flags if desired)

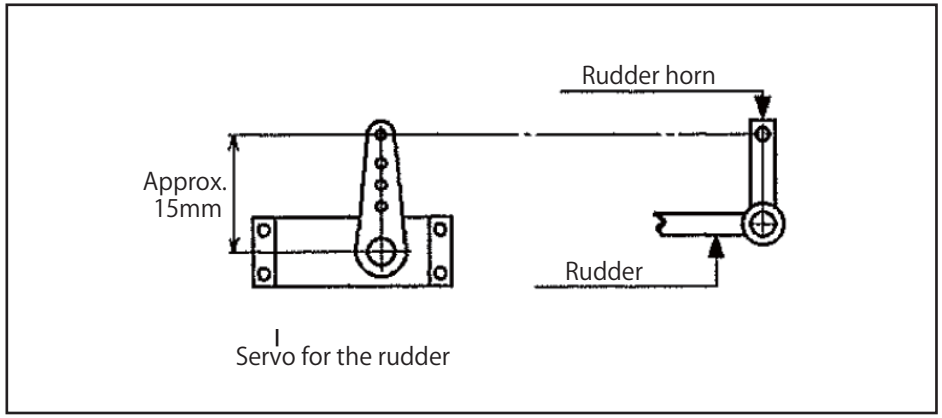


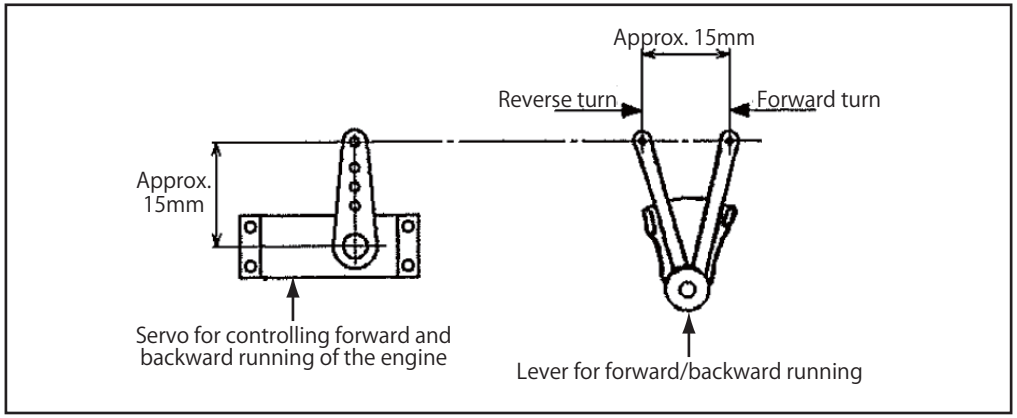
ASSEMBLING 25

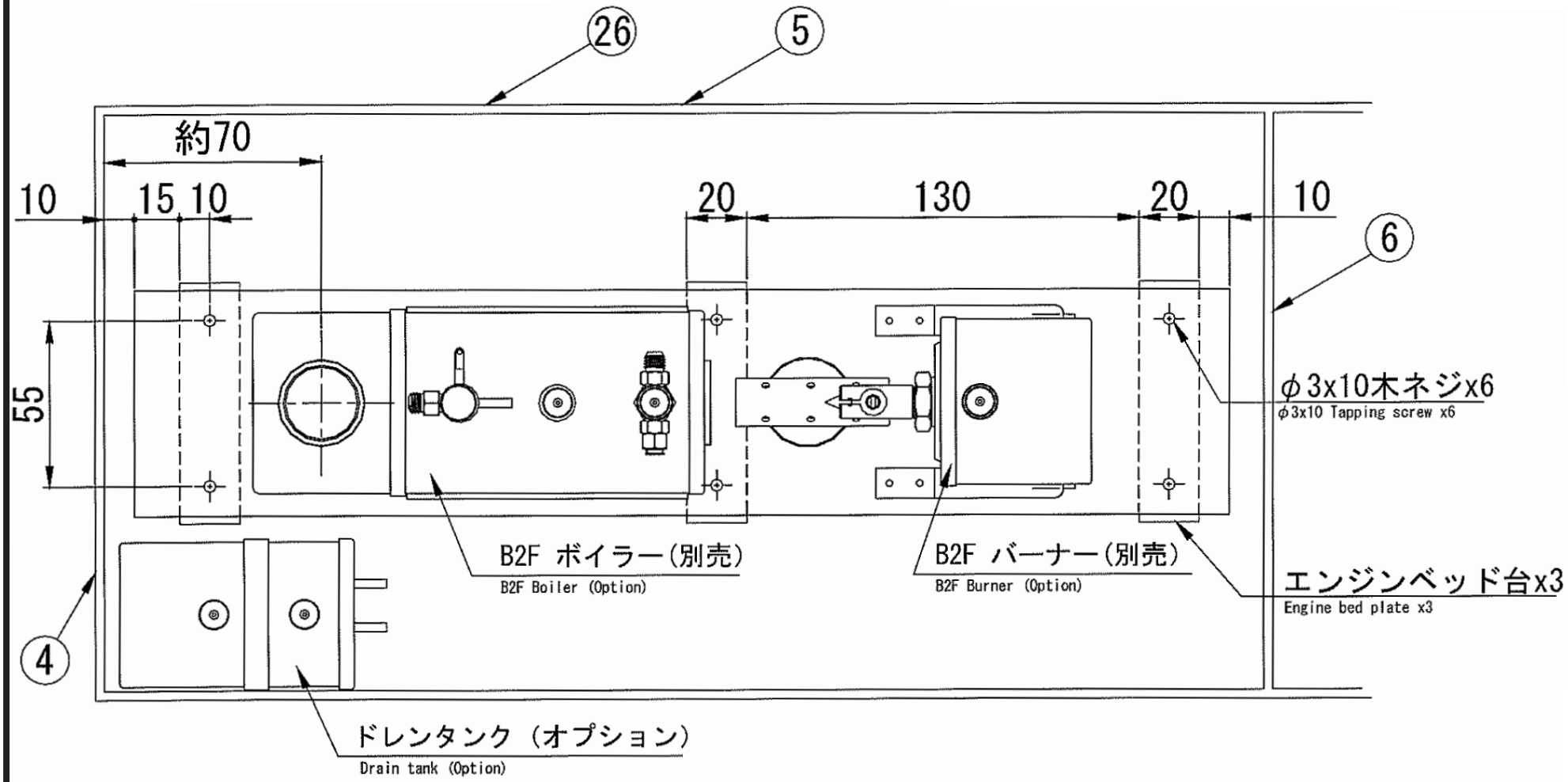
- It is necessary to adjust the position of the hole of the servo horn to obtain the required working stroke.
- The push rod must be as straight as possible. When it needed to bend, make it roundly.











ボイラーの取付け位置は、ボイラーの煙突とキャビンの煙突位置が合うように決定して下さい。

Determine the boiler mounting position to match the boiler's smokestack with the cabin's smokestack.

WARNING (For operation of the steam engine)

- Make sure to close the lid of the bottle containing alcohol after feeding fuel into the burner. Never leave the bottle near the burner.
- DO NOT look into the engine, boiler, burner, and smokestack from above during operation. They might blow off steam suddenly.
- Never touch the screw, paddle wheel during operation.
- Starting running by hand is very dangerous. Never do that.
- After the operation, the engine, boiler, and burner are very hot so do not touch them until they cool down to avoid scald.
- Do not use the engine, boiler, and burner for the purpose besides for model ships.
- Please be advised that we assume no responsibility whatsoever for any damages resulting from the use of the products.

Disclaimer

All the steam engine, boiler and burner made in our factory are operated by means of steam generated by flame. When you use them, take a special care of fire or burn injury. We assume no responsibility whatsoever for any accidents or damages.

Wrong usages which will be not included in the warranty are as follows.

- Defect caused by using the undesignated liquid. (other than Water for the boiler, Alcohol for the burner)
- Defect caused by unrequited modification.
- Defect caused by usage beside the procedure described in this instructions.

All specifications and models are subject to change without notice.

SAITO SEISAKUSHO CO., LTD.
22-7, 3-chome, Tokagi, Ichikawa-shi, Chiba 272-0024, Japan
TEL : 047-378-4156 FAX : 047-378-4155

BS:Brass AL:Aluminum ABS:ABS resin T:Tube hex:Hexagon

VICTORIA (1)Handrail post

NO	ITEM	SKETCH	QTY	REMARKS
R1	Handrail post		54	BS

VICTORIA (2)Handrail post

NO	ITEM	SKETCH	QTY	REMARKS
R2	Handrail post		68	BS

VICTORIA (3)Handrail post

NO	ITEM	SKETCH	QTY	REMARKS
R3	Handrail post		16	BS

VICTORIA (4)Handrail post

NO	ITEM	SKETCH	QTY	REMARKS
R4	Handrail post		81	BS

VICTORIA (5)Window

NO	ITEM	SKETCH	QTY	REMARKS
W1	Window frame		128	AL

VICTORIA (6)Window

NO	ITEM	SKETCH	QTY	REMARKS
W2	Window frame		60	AL

VICTORIA (7)Window

NO	ITEM	SKETCH	QTY	REMARKS
W3	Window frame		78	AL

VICTORIA (8)Window

NO	ITEM	SKETCH	QTY	REMARKS
W4	Window frame		2	AL Rounded

VICTORIA (9)Window

NO	ITEM	SKETCH	QTY	REMARKS
W5	Window frame		R2 L2	AL Rounded

VICTORIA (10)Window

NO	ITEM	SKETCH	QTY	REMARKS
W6	Vinyl chloride plate for window		4	0.5t

VICTORIA (11)Drive system

NO	ITEM	SKETCH	QTY	REMARKS
P3	Paddle wheel bearing		2	w/ M3x10 +screws & nuts x 4pairs
P4	Bearing Mounting metal		2	BS0.8t w/ M3x10 +screws & nuts x 6pairs
P5	Bearing Mounting metal		2	BS0.8t
P6	Shaft collar		2	BS O.D.Ø8 I.D.Ø4 x 3
P7	Paddle wheel crank rod		2	BS
P8	Paddle wheel crank		4	w/ M4x4 set screw
P9	Crank bolt & nut (w/washer)		4 sets	BS M3x10

VICTORIA (12)Drive system

NO	ITEM	SKETCH	QTY	REMARKS
P1	Paddle wheel shaft		1	SUS Ø4x150
P2	Paddle wheel flange		4 sets	M3x4 set-screws x 4pcs M2.6 bolts & nuts x 16pcs

VICTORIA (13)Life boat

NO	ITEM	SKETCH	QTY	REMARKS
B1	Boat davit (side)		8	BS
B2	Boat		4 sets	w/ frame plate

VICTORIA (14)Steering system

NO	ITEM	SKETCH	QTY	REMARKS
C1	Front rudder		4	BS
C2	Rear rudder		2	BS
C3	Rudder horn		3	w/ M3x3 set screws
C4	Rudder horn (L)		3	w/ M3x3 set screws
C5	Front rudder pipe		4	BST O.D.Ø6 I.D.Ø4 x 40
C6	Rear rudder pipe		2	BST O.D.Ø6 I.D.Ø4 x 25
C10	Rudder horn 4 connections joint rod		1 set	M2x5 BS hex bolts & nuts x 4pcs
C11	Rudder horn 2 connections joint rod		1 set	M2x5 BS hex bolts & nuts x 2pcs

VICTORIA (15)Steam system

NO	ITEM	SKETCH	QTY	REMARKS
ST3	Drain tank joint pipe		2	Ø4 BST
ST4	Joint pipe		1	Including joint nuts on both ends

VICTORIA (16)Outfit

NO	ITEM	SKETCH	QTY	REMARKS
G1	Side lamp tray		1 each L/R	BS
G2	Lamp		5	For Side light Mast light
G3	Pulley		12	Plastic
G4	Front deck post pipe		4	Ø3x30 BST
G5	Whistle		1	w/ band 3x6 screws & nuts

VICTORIA (17)Steering system

NO	ITEM	SKETCH	QTY	REMARKS
C7	Steering wire set		1	Wire 600mm
			2	Spring
			2	Ball link rod
C8	Pulley for wire		2 set	
C9	Pipe for Steering wire		2	Ø3x65 BST

VICTORIA (18)Small fittings

NO	ITEM	SKETCH	QTY	REMARKS
E1	O-ring for ring buoy		12	P7
E2	String for Rope		3 m	
E3	Spring for Rope		3	
E4	Eye bolt		14	BS

VICTORIA (19)Steam system

NO	ITEM	SKETCH	QTY	REMARKS
ST2	Rubber pipe for Boiler , burner		1 m	O.D.Ø5 I.D.Ø2.3 Neoprene rubber
ST6	Exhaust pipe connecting pipe		500 mm	O.D.Ø5 I.D.Ø3.2 Neoprene rubber
ST7	Drain tank joint pipe holding metal		W3 L1	M2 bolts & nuts x 3pairs 2mm tapping screws x 2pcs

BS:Brass AL:Aluminum ABS:ABS resin T:Tube hex:Hexagon

VICTORIA (20)Steering system

NO	ITEM	SKETCH	QTY	REMARKS
C_{12}	Linkage rod		5	Ø2x60 single end thread
C_{13}	Linkage rod pipe		1	Ø3x25
C_{14}	Linkage rod		1	Ø2x30 single end thread
C_{15}	Linkage rod connection pipes		1 each	BST Ø3x190 Ø3x185
C_{16}	Ball link set		8 sets	Ø2x8 M2 nuts

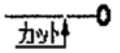
VICTORIA (21)Front mast

NO	ITEM	SKETCH	QTY	REMARKS
M_1	Ring for front mast		2 sets	M2 hex bolts & nuts x 5pcs Band x 2pcs
M_2	Front mast pipe		1	O.D.Ø7 I.D.Ø5x90 BST
M_3	Front mast stopper		6	O.D.Ø6
M_4	Joint plate		5	
M_5	Search light		4 sets	w/bases
M_6	Mast top		2	
M_7	Derrick boom ring		2	

VICTORIA (22)Front deck

NO	ITEM	SKETCH	QTY	REMARKS
F_4	Capstan		1	AL
F_5	Bollard /Rope drum		26	AL
F_6	Pressure ventilator		6	AL
F_7	Ventilator pipe		2	Ø12x25 ALT
F_9	Ventilator pipe		4	Ø12x52 ALT

VICTORIA (23)Door

NO	ITEM	SKETCH	QTY	REMARKS
D_1	Door		35	AL
D_2	Door		21	AL
D_3	Small pin for door knob		77	

VICTORIA (24)Screws

NO	ITEM	SKETCH	QTY	REMARKS
	Engine mounting bolt		4	M3 +25mm
	Engine mounting nut		4	M3 hex nut
	Engine mounting spring washer		4	M3
	Engine bed mounting screw		4	3x15 tapping screw
	Boiler bed & Servo head mounting screw		10	3x10 tapping screw
	Flat washer		18	M3

VICTORIA (25)Smoke stack

NO	ITEM	SKETCH	QTY	REMARKS
S_1	Smoke stack		1	Ø39x155 ALT w/ring
S_2	Smoke stack		1	AL

VICTORIA (26)Wooden parts

NO	ITEM	DIMENSIONS	QTY	REMARKS
	Boiler, burner drain tank bed	15x20x80	4	Cypress bar
	Mast, arm		5pcs /1set	Cypress bar
	Engine bed	15x15x400	1	

VICTORIA (27)Door

NO	ITEM	DIMENSIONS	QTY	REMARKS
	Deck	1.5x6x600mm	23	
	Cypress bar	4x4x900mm	8	
	Balsa triangular bar	15x15x900mm	1	
	Brass wire	Ø2x500mm	1	
	Brass wire	Ø1x1m	12	
	Brass wire	Ø0.5x1m	18	
	Brass wire	Ø1.5x500mm	1	
	ABS square bar	3x3x1m	1	
	ABS material	1x10x500mm	1	For stairs
	ABS	1x6x500mm	1	For bollard base
	ABS	2x10x500mm	1	
	ABS	2x5x200	1	