AUSTRALIAN RIVER BOAT SERIES WOODEN MODEL KIT

ISABELLA-PADDLE STEAMER 1912

SCALE 1:60









LENGTH: 420mm HEIGHT: 150mm

ITEM CODE: KTMS1008

Modellers Shipyard

www.modellersshipyard.com

SEAL OF QUALITY Modellers Shipyard

BUILDING INSTRUCTIONS

Version 3.1

Paddle Steamer *Isabella* 1912

Modellers Shipyard is proud to present another kit in our series of models that have significance to Australian history. We are the only manufacturer of wooden model kits in Australia.

Paddle steamers and riverboats formed a vital part in opening up the inland of Australia. The inland river system of the Murray, Darling, Lachlan and Murrumbidgee formed a network to connect inland communities across the Australian states of New South Wales, Victoria, Queensland and South Australia. Paddle steamers have been plying these inland waters since 1853 travelling along the river system from Goolwa at the mouth of the Murray to the inland towns of Bourke on the Darling, Wagga Wagga on the Murrumbidgee and Forbes on the Lachlan.

Paddle steamers opened up the inland of eastern Australia allowing goods such as wool and wheat to be transported along the rivers to the inland ports of Echuca and Goolwa and then for transfer to the sea ports of Port Elliot, Adelaide or Melbourne. These same paddle steamers then transported cargo needed for these growing inland communities.

Life on the rivers was hard for the owners, crew and often families on the paddle steamers. Droughts often stranded the boats for months on end. Floods brought their own hazards with fast flowing waters , poorly defined river banks and submerged tree snags made navigation difficult and often dangerous.

The PS *Isabella* is typical of the working boats that plied the river system in the late 1800s to the early 1900s. Working boats like her towed cargo barges up and down the rivers delivering provisions to the river communities and providing vital links for the inland communities to the outside world.

Part No	Description	Quantity	Location
1	Hull Base	1	Board 1
2	Bulkhead	1	Board 1
3	Bulkhead	1	Board 1
4	Bulkhead	1	Board 1
5	Bulkhead	1	Board 1
6	Bulkhead	1	Board 1
7	Bulkhead	1	Board 1
8	Bulkhead	1	Board 1
9	Bulkhead	1	Board 1
10	Bulkhead	1	Board 1
11	Bulkhead	1	Board 1
12	Engine Bay	1	Board 1
13A/B	Keel	2	Board 1
14	Stern Blocks	2	Board 1
15	Bow Blocks	2	Board 1
16	Basswood 2x5x400mm	10	Timber Stock
17	False Keel	1	Board 3
18	Base feet	4	Board 1
19	Engine	5	Board 1
20	Engine	1	Board 1
21	Engine	4	Board 1
22	Engine	1	Board 1
23	Engine	1	Board 1
24	Engine	1	Board 1

Part No	Description	Quantity	Location
25	Dowel 5mm x 100mm	1	Timber Stock
26	Engine Trim	1	Board 5
27	Engine Trim	1	Board 5
28	Engine Trim	1	Board 5
29	Paddle Wheels A	2	Board 4
30	Paddle Wheels B	2	Board 4
31	Wheel Jigs	1	Board 1
32	Wheel Jigs	1	Board 1
33	Paddles	32	Board 5
34	Wheel Housing	2	Board 4
35	Wheel Housing	2	Board 4
36	Wheel Housing	2	Board 4
37	Wheel Housing	2	Board 4
38	Wheel Housing	2	Board 4
39	Birch 1x4x400mm	30	Timber Stock
40A-B	Lattice	2	Board 5
41	Plywood strips	24	Board 5
42	Bearings	2	Board 1
43	Dowel 3mm x 200mm	1	Timber Stock
44	Main Deck	1	Board 3
45	Crew Quarters	1	Board 2
46	Crew Quarters	1	Board 2
47	Crew Quarters	1	Board 2
48	Crew Quarters	1	Board 2

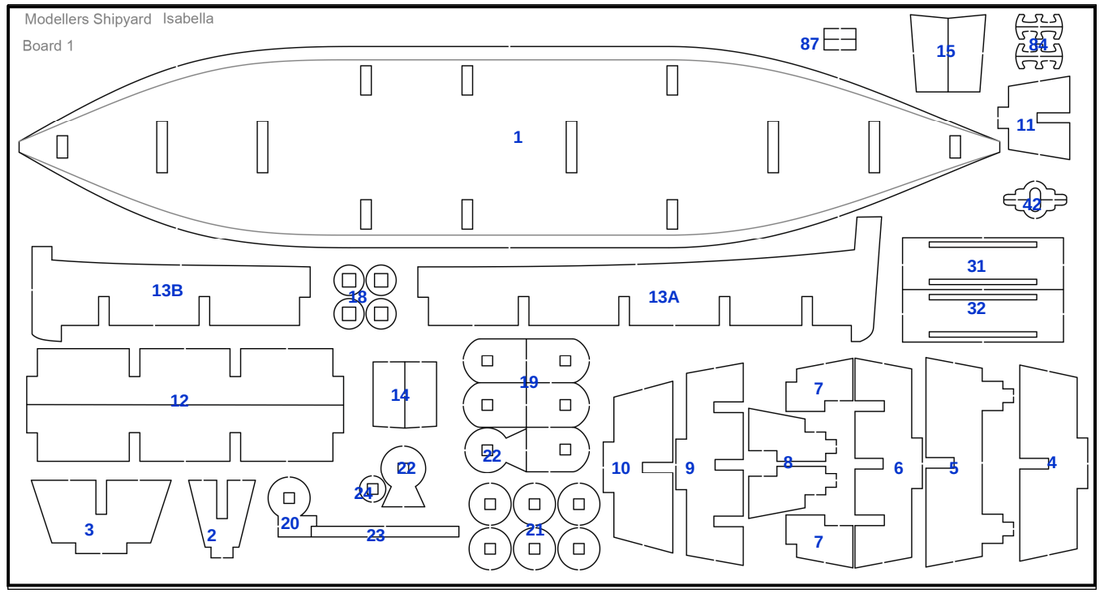
Part No	Description	Quantity	Location
49	Railings	1	Board 2
50	Supports	1	Board 2
51	Shaft Pulley	1	Board 4
52	Not Used		
53	Wheel House	1	Board 2
54	Wheel House	1	Board 2
55	Wheel House	1	Board 2
56	Wheel House	1	Board 2
57	Wheel House	1	Board 2
58	Timber planks	20	Board 3
59	Not Used		
60	Helm		Parts Card
61	Upper Cabin	1	Board 2
62	Upper Cabin	1	Board 2
63	Upper Cabin	1	Board 2
64	Upper Cabin	1	Board 2
65	Upper Cabin	1	Board 2
66	Upper Cabin	1	Board 2
67	Plywood strips	4	Board 5
68	Boat Lights	1	Board 4
69	Boat Lights	1	Board 4
70	Boat Lights	1	Board 4
71	Boat Lights	1	Board 4
72	Eye Pins	Pkt	Parts Card

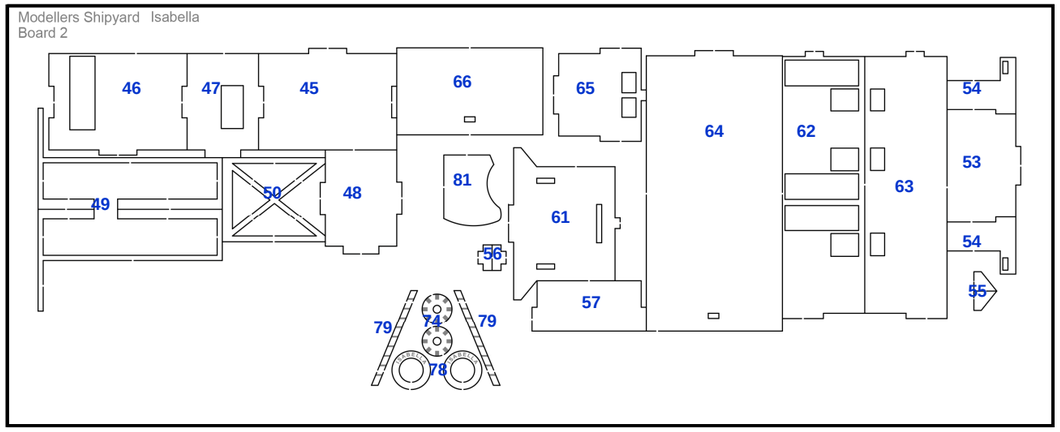
Part No	Description	Quantity	Location
73	Cord - Grey - 0.25mm	1	Parts Card
74	Wheel Hubs	2	Board 2
75	Wheel Hubs	2	Board 4
76	Name Plates	2	Board 5
77	Not Used		
78	Life Buoys	2	Board 2
79	Ladder runners	2	Board 2
80	Ladder steps	9	Board 5
81	Rudder	1	Board 2
82	Rudder Hinges	2	Parts Card
83	Nails	Pkt	Parts Card
84	Bollards	2	Board 1
85	Chain - black 3mm	500mm	Parts Card
86	Pulleys - brass 4mm	4	Parts Card
87	Sampson Post	2	Board 1
88	Rope 1.75mm x 400mm	1	Parts Card
89	Stanchions - brass 15mm	20	Parts Card
90	Hatch base	1	Board 3
91	Dowel 2mm x 100mm	1	Timber Stock
92	Flag	1	Sheet 13
93	Upper Deck	1	Board 4

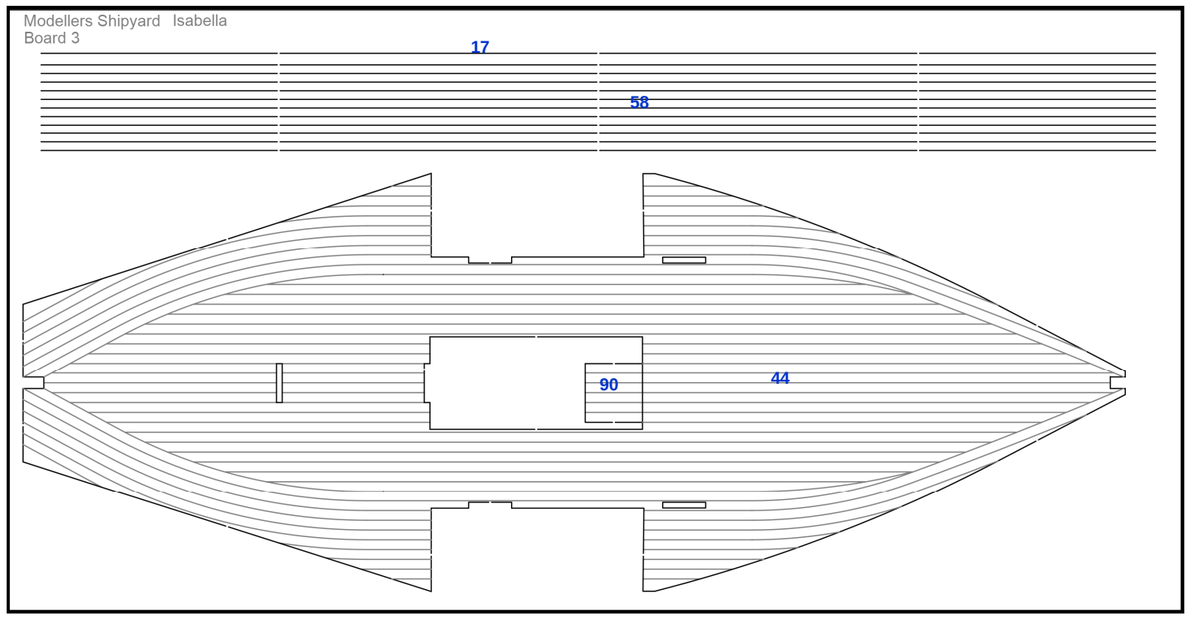
Murray River
Paddle Steamer
ISABELLA
1912
SHEET 1

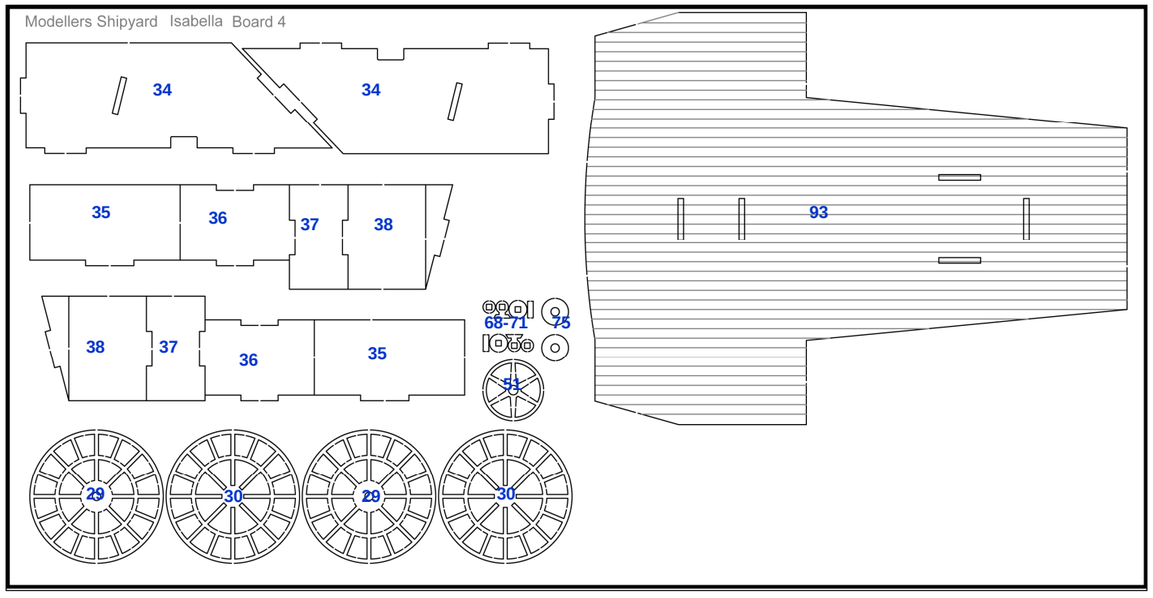
Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©

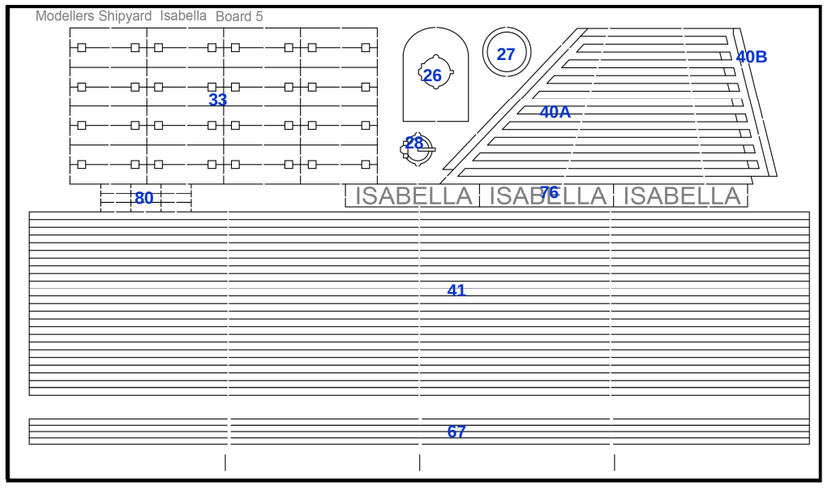
Laser Cut Boards











Murray River Paddle Steamer
ISABELLA
1912
SHEET 2

Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©

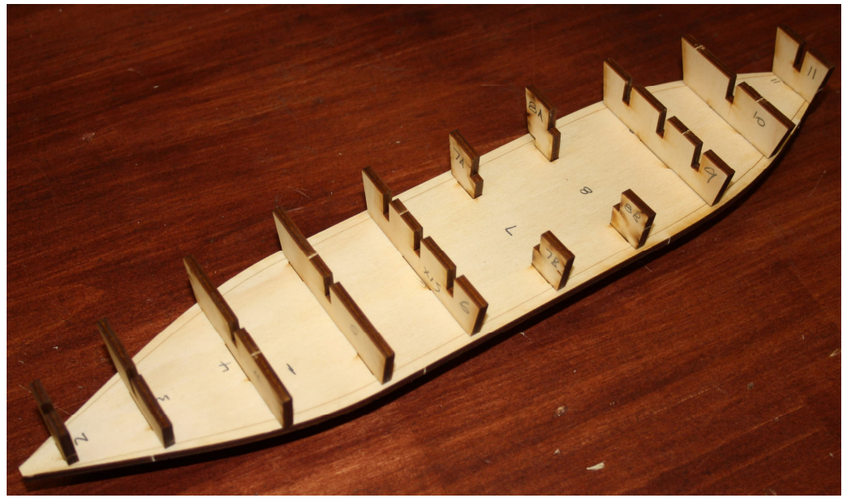
1.0 Stain the Decks

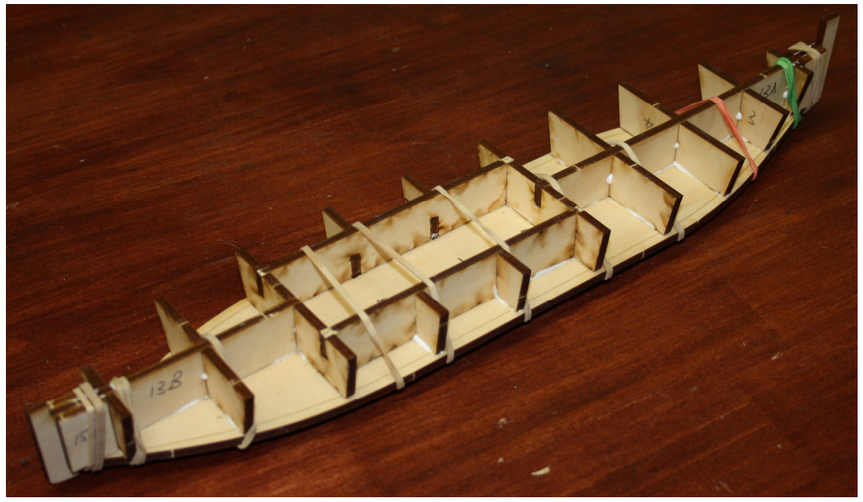
Identify the main deck P44 and upper deck P93. Use diluted mahogany wood stain to colour the two decks as shown. Set both decks aside to dry.



2.0 Assemble the Keel & Frames

Identify P1 through to P15. Dry fit parts together. Some fractional fitting may be necessary. Note P14 are the stern blocks and P15 are the bow blocks. Once satisfied with the fit of each part apply PVA glue to each and hold in place with elastic bands while the glue sets.



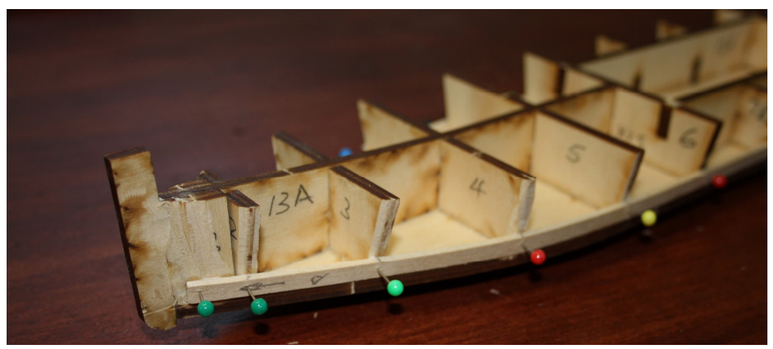


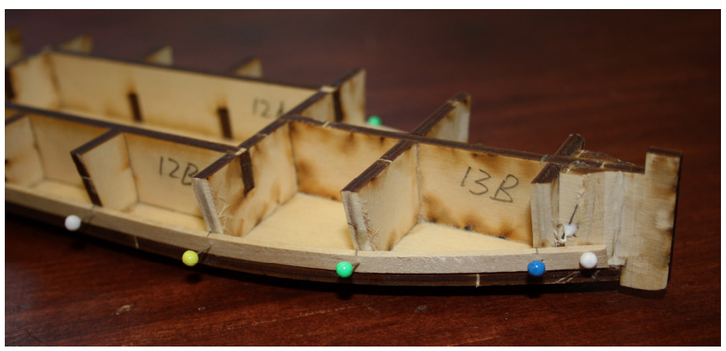
3.0 Fair the Frames

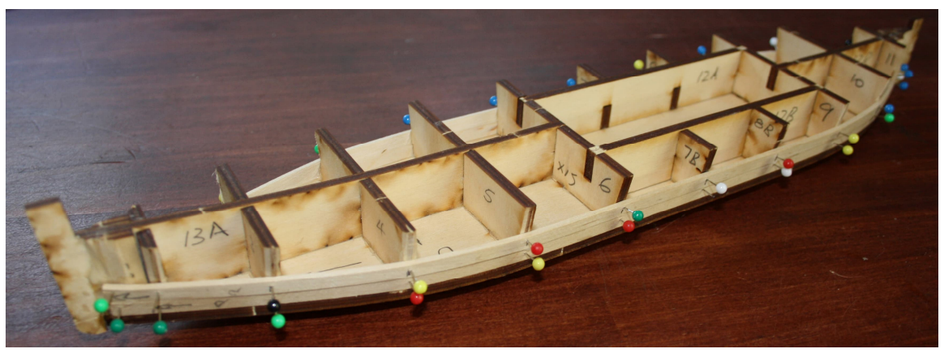
Fair the frames as required. You will find that the bow block and frames 2, 3 & 4 will need fairing at the bow. At the stern the stern blocks and frames 9, 10 & 11 will need fairing.

4.0 Planking the Hull

Identify the hull planks P16 2x5x400mm basswood. Fit a plank on each side of the hull. Use a hand held plank bender to shape the planks around the bow and stern areas. When satisfied glue and pin in place.







Murray River Paddle Steamer
ISABELLA
1912
SHEET 3

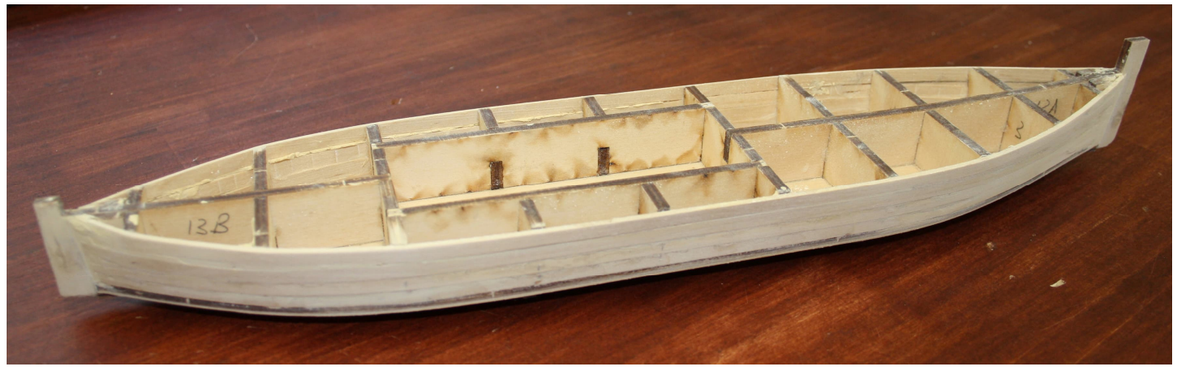
Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©

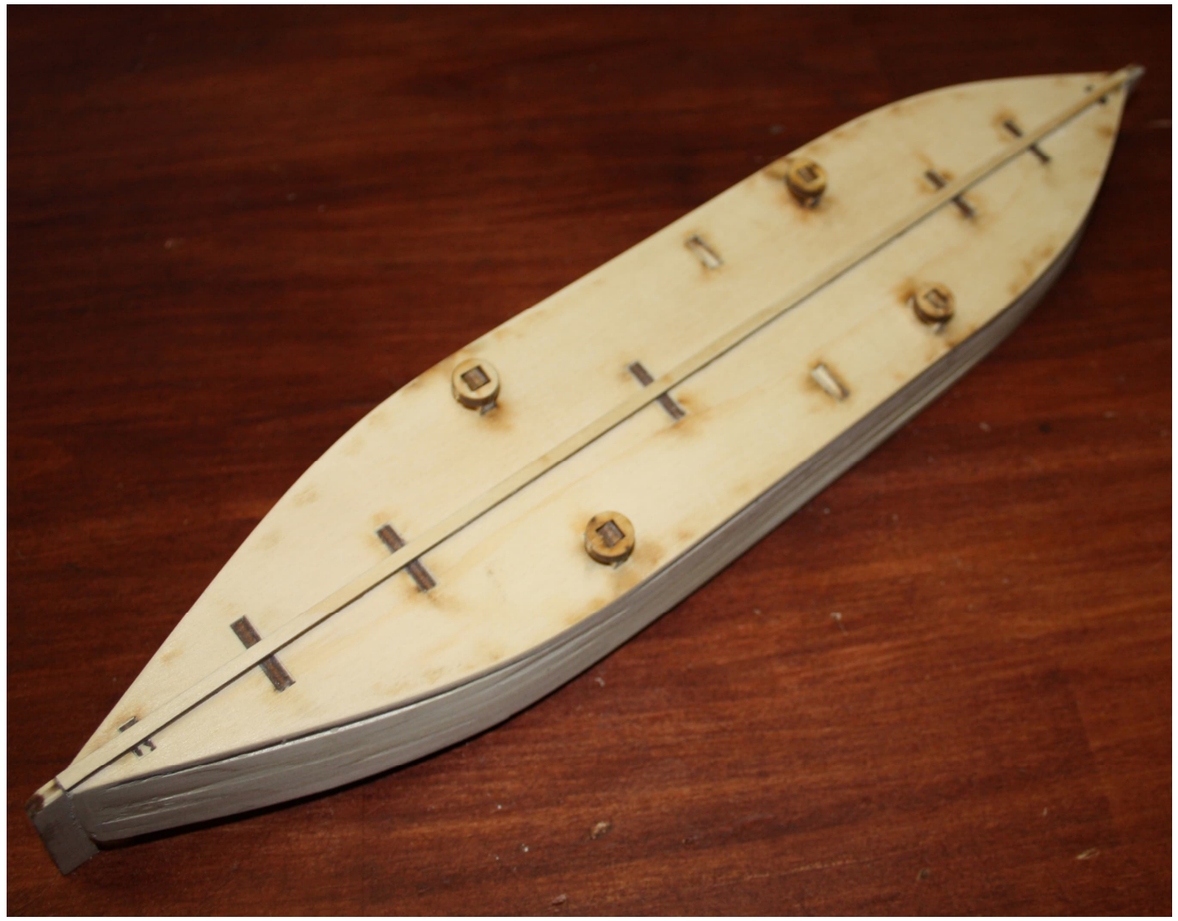
5.0 Finish the Hull

Fit 4 hull planks each side of the hull. Use wood filler if need to fill in any gaps. Use sandpaper to finish the hull.

Identify the false keel P17. Fit and fix in place as shown.

Identify the base feet P18. Fit and fix in place as shown.

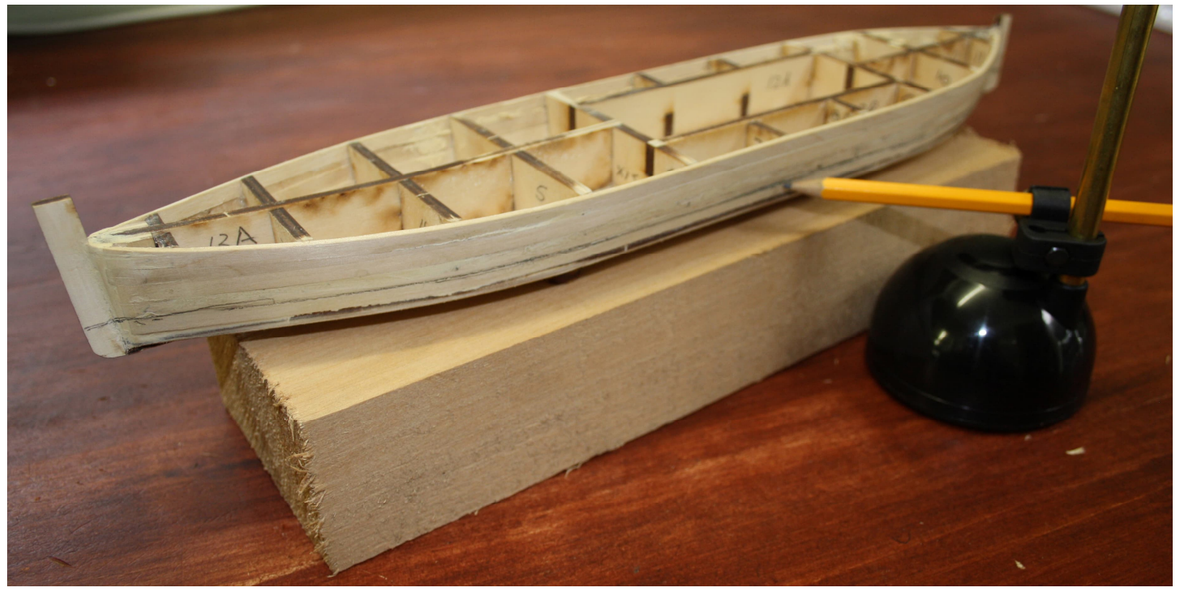




6.0 Mark Waterline

Mark a waterline 10mm from the base of the hull.

Below the waterline paint the side and underside of the hull black. Above the waterline paint the hull white. Also paint the inside of the steam engine bay white as shown.



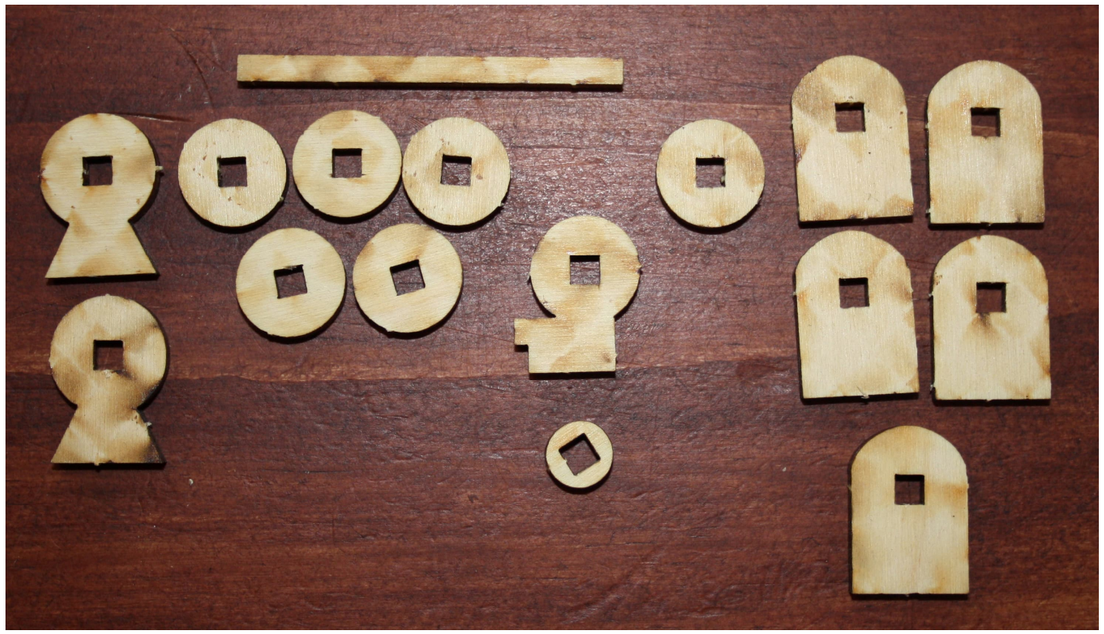


Murray River
Paddle Steamer
ISABELLA
1912
SHEET 4

7.0 Steam Engine

Identify P1, P20, P21, P22, P23 and P24

Assemble as shown. Use a file to remove any notches from the laser cutting. Once satisfied glue all parts.





8.0 Steam Engine Stack

Identify the steam engine stack P25 - 5mm dowel. Cut a length 42mm long. Drill a 5mm hole in the top front of the engine body and fix in place the stack. Paint the whole steam engine black.

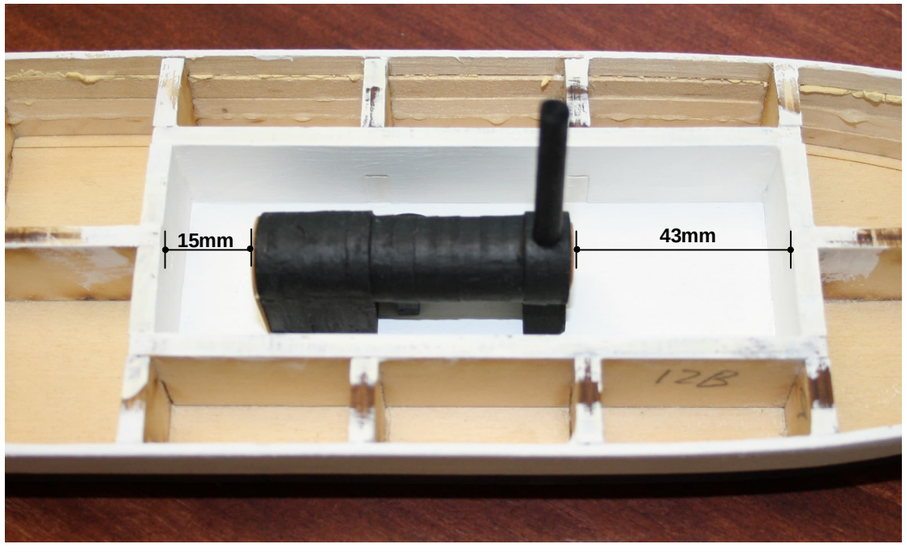
Identify P26, P27 & P28. Fix in place as shown.





9.0 Locate Steam Engine

Locate the steam engine in the engine bay. Place the engine central in the bay and 43mm from the stern end and 15mm from the bow end of the engine bay. Place the hull safely away to be used later.



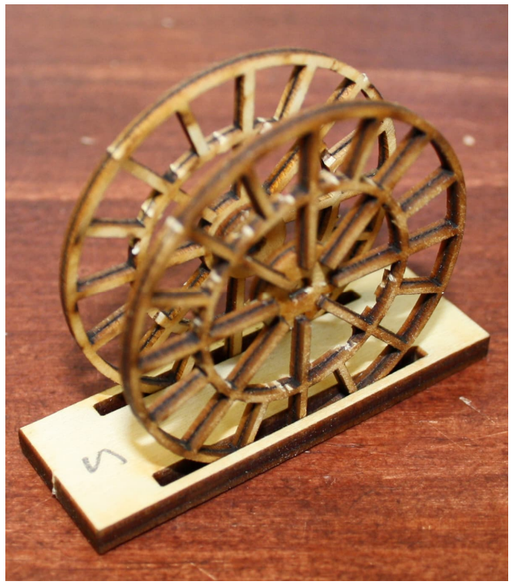
Murray River
Paddle Steamer
ISABELLA
1912
SHEET 5

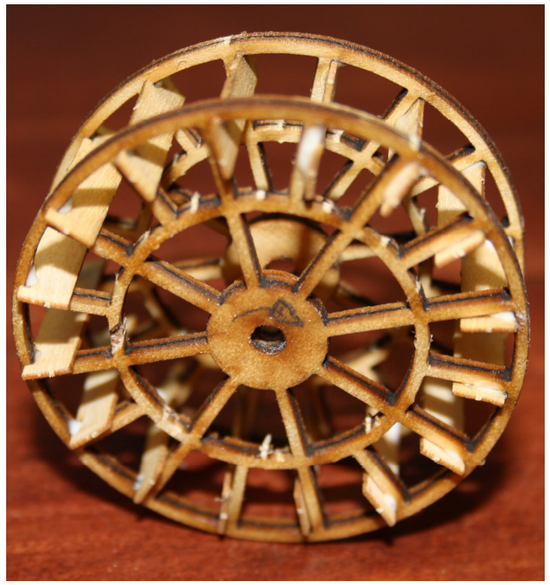
10.0 Paddle Wheels
Identify the Paddle Wheels P29 and P30. Take note that P29 are the outer wheels. Identify the wheel hubs 74 and 75. Note that P74 are the outer hubs. Also identify the paddle wheel jigs P31 & P32. Identify the paddles P33.

Use the jigs guides to hold the wheel halves in place as shown. Before gluing the paddles in place select a direction of rotation for a paddle wheel - mark your chosen direction on the inner wheel hub.. Then mark the direction of rotation of the second wheel to be in the opposite direction to the first wheel.

Use PVA glue to fix the paddles in place. Make sure the paddles are placed on the side of the wheel spoke that will support the paddle as the wheel rotates against the water.

Once the glue is dry paint the paddle wheels white. Put the wheels safely aside to be fitted to the model later.



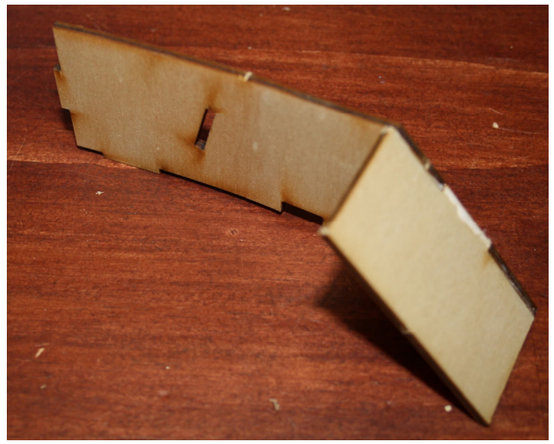


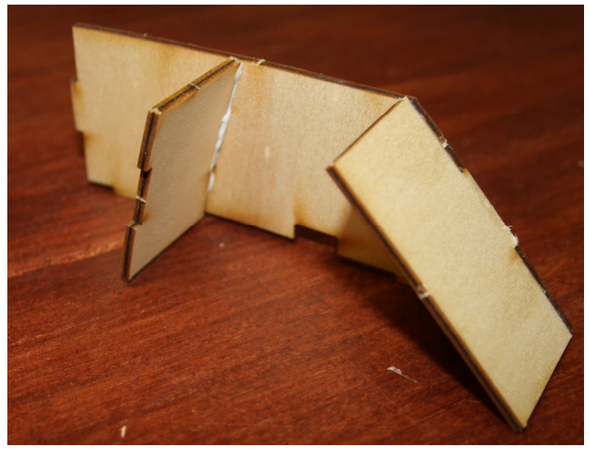


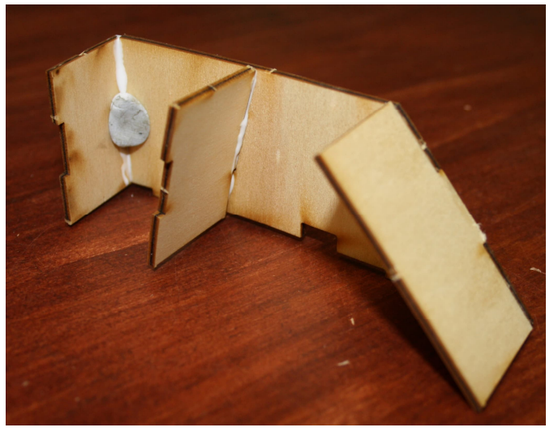
11.0 Paddle Wheel Housing
Identify the paddle wheel housing parts P34, P35, P36, P37 & P38.

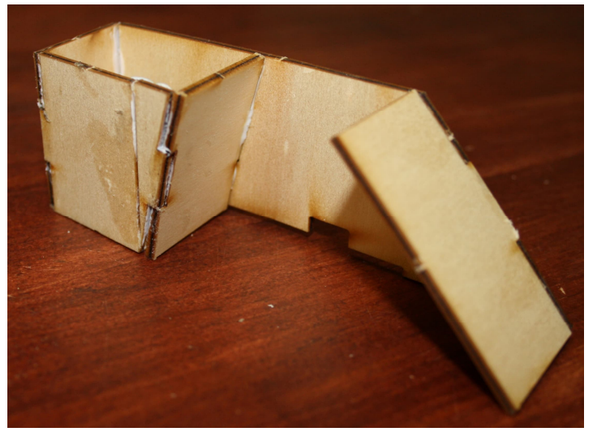
Assemble as shown. Apply PVA glue and use blue tac to hold parts in place while glue sets.

Repeat for the other paddle wheel housing.



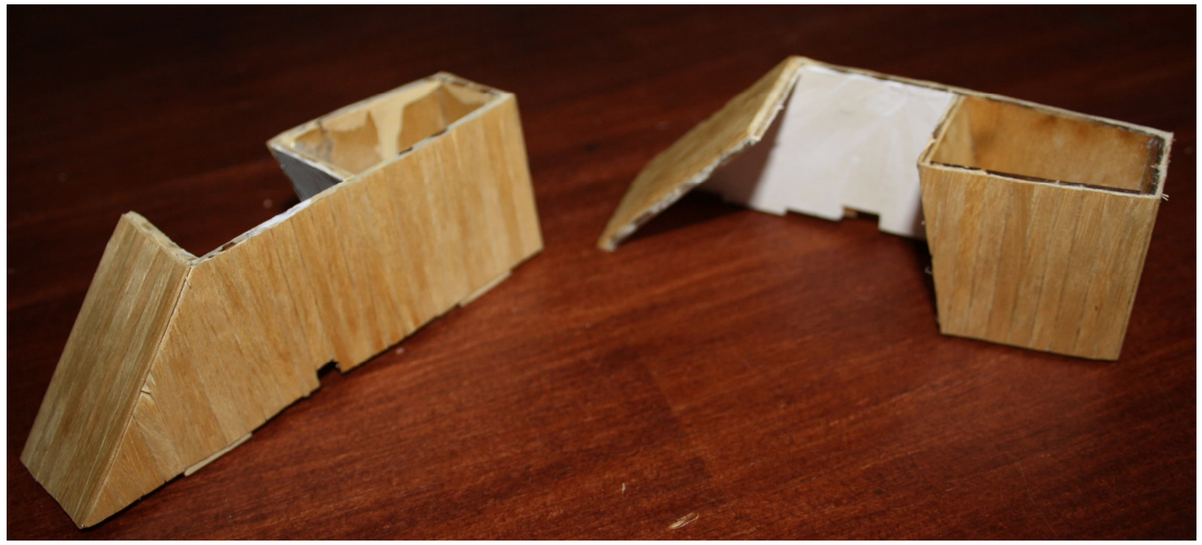




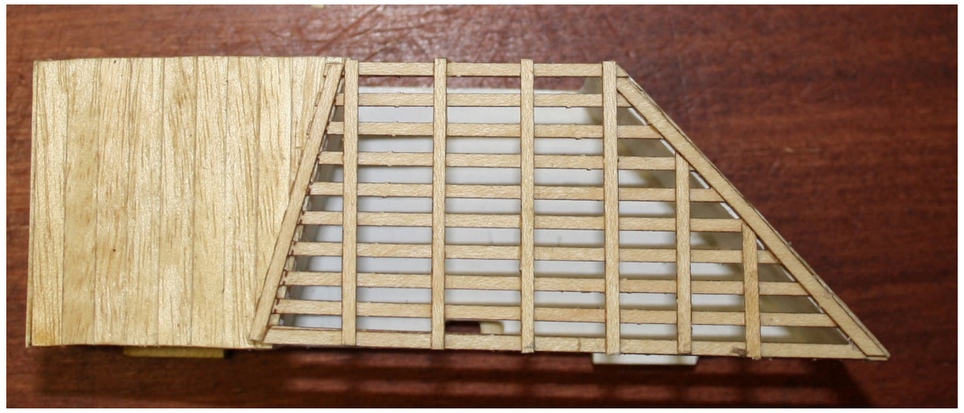


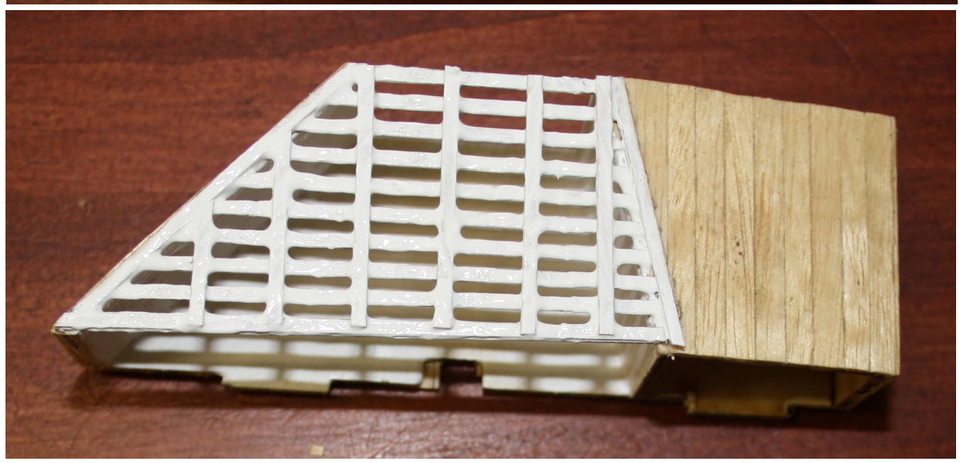
Murray River
Paddle Steamer
ISABELLA
1912
SHEET 6

12.0 Plank & Paint Paddle Wheel Houses
Identify P39 1x4mm birch timber strips. Plank the external faces of the paddle wheel house with these timber strips. Paint the inside of each paddle wheel house white.



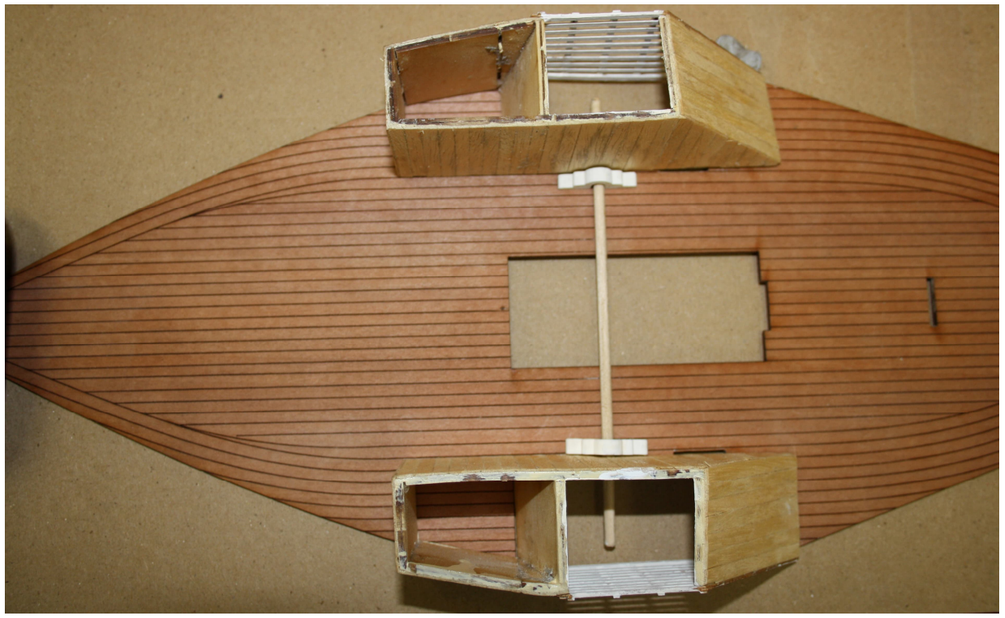
13.0 Housing Lattice
Identify the paddle wheel house lattice P40 and the plywood strips P41 as the vertical lattice pieces. Assemble and paint as shown.





14.0 Drive Shaft Bearings
Identify the drive shaft bearings P42. Paint these parts white. Identify the drive shaft P43 - 3mm dowel. Cut to a length of 150mm. Identify the main deck P44. Trial fit the paddle wheel houses, drive shaft and bearings on the main deck.

Locate the position of the bearings and glue in position on the main deck. Remove housings and drive shaft and store safely to be used later.



15.0 Crew Quarters
Identify the parts for the crew quarters P45, P46, P47 & P48.

Assemble as shown. Paint the window a light grey. Use P67 1x1mm walnut trim around the window and door. Use P39 Birch timber to plank the external surface as shown. Use P77 1x2mm walnut trim around the base of the crew quarters.





Murray River Paddle Steamer ISABELLA 1912
SHEET 7

Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©

16.0 Engine Bay Railings & Support
Identify the engine bay rails and support P49 & P50. Paint the parts white. Do not fit to the model yet.

17.0 Drive Shaft Pulley
Identify the drive shaft pulley P51. Paint black as shown.
Also paint the drive shaft P43 black.

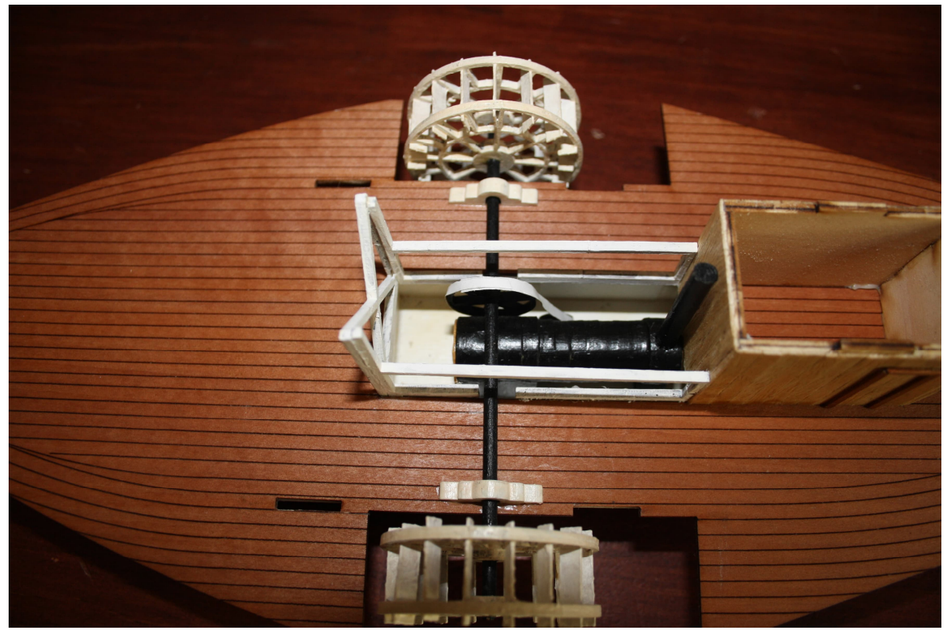


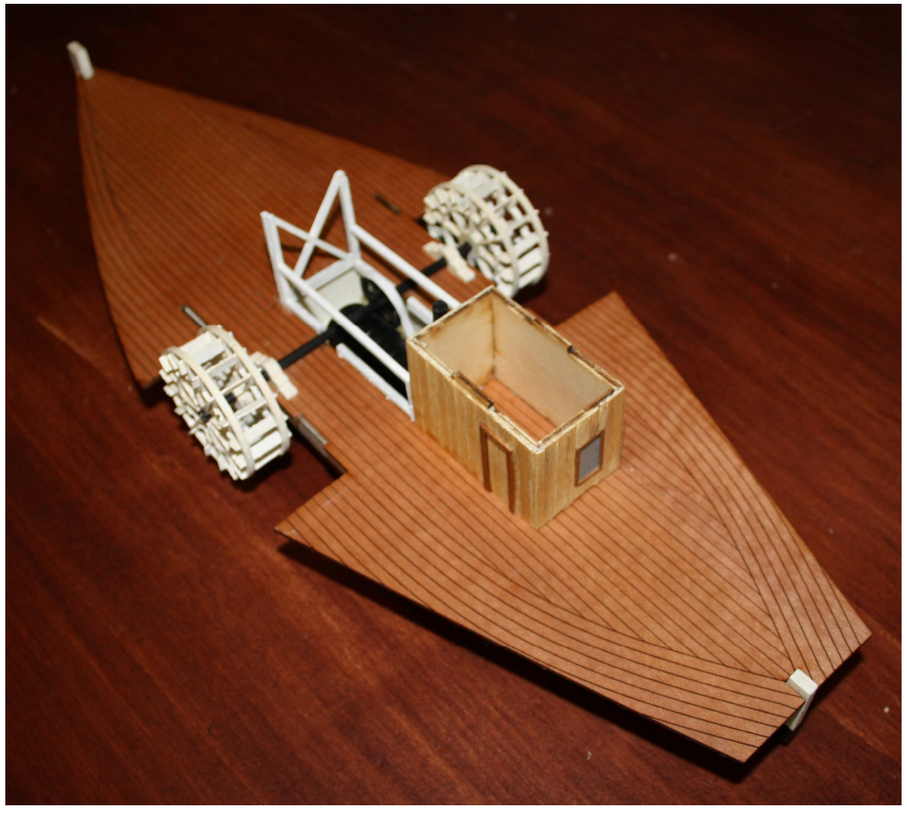
18.0 Fit Main Deck
Fit and glue in place the main deck P44 to the hull.

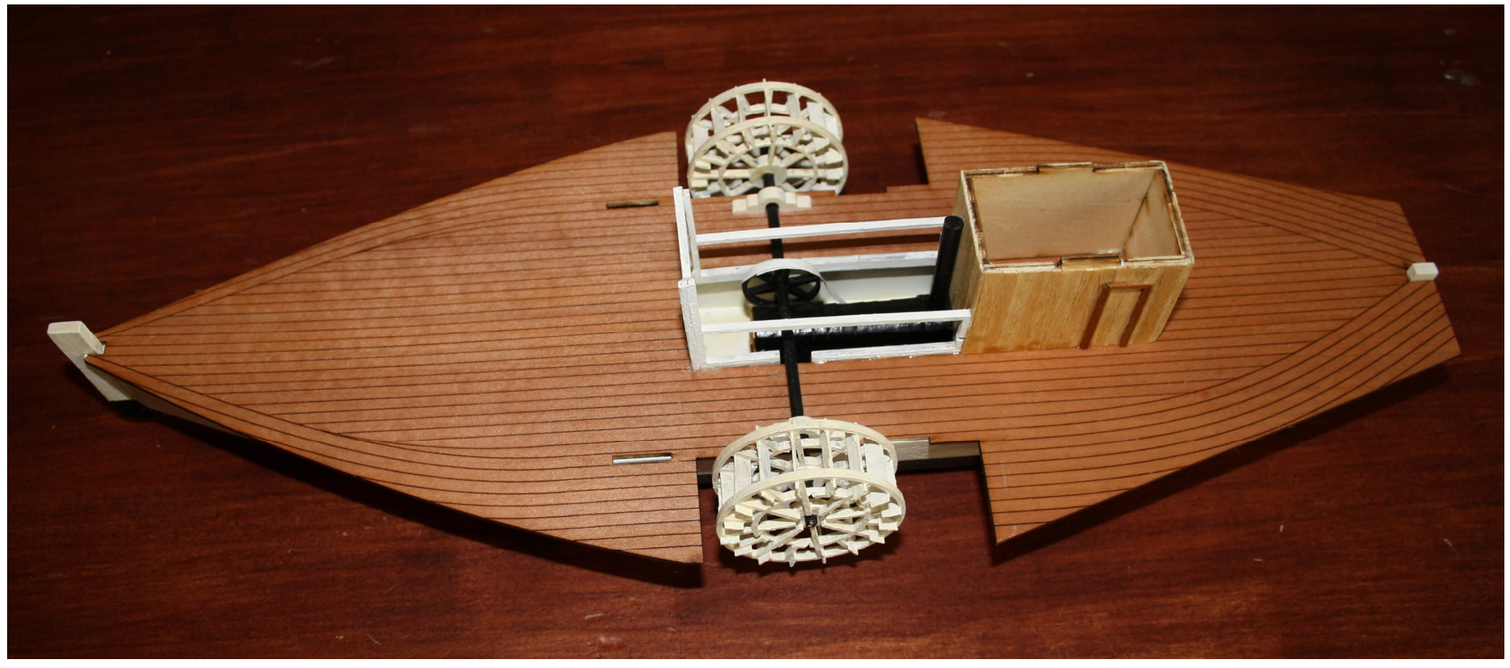
19.0 Assemble Main Deck Parts
Fit the drive shaft through one bearing and fit the drive pulley to the drive shaft and slide the shaft through the second bearing. Fit the two paddle wheels to the drive shaft. Fractionally fit as needed. Glue in place.

For the leather drive belt cut a 200mm length of white paper 4mm wide - apply paper glue to one face and fold in half - paint a dark brown colour. Once dry fit around the engine drive pulley P24 and the drive shaft pulley and glue in place.

Fit and glue in place the crew quarters. Fit and glue in place the engine bay railings and support as shown.







Murray River
Paddle Steamer
ISABELLA
1912
SHEET 8

20.0 Upper Deck

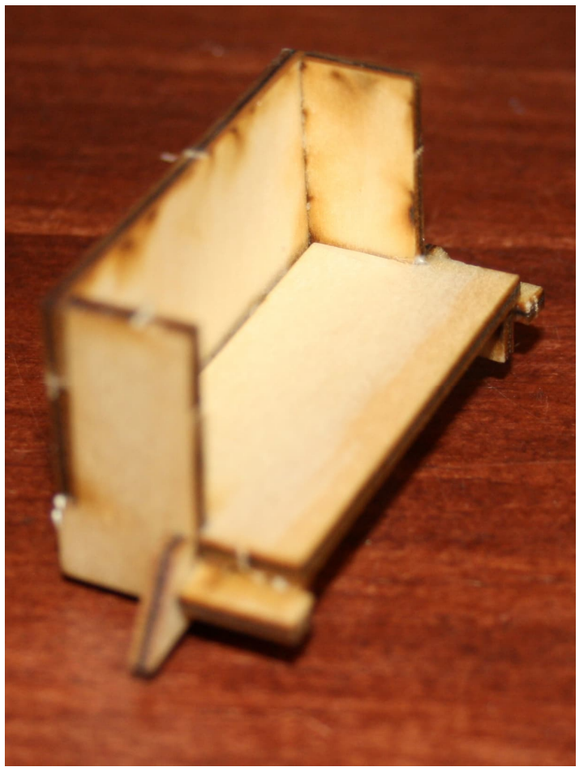
Identify the upper deck P93. Fit and glue in place the paddle wheel housings.

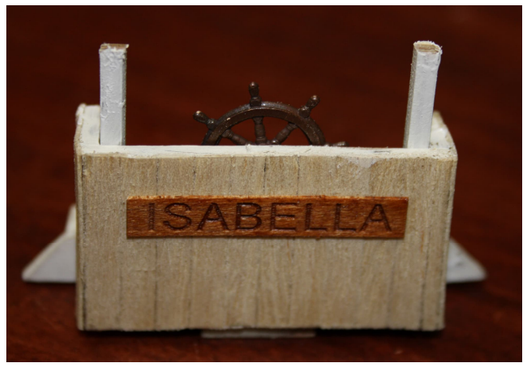
Fit and glue in place the upper deck as shown.

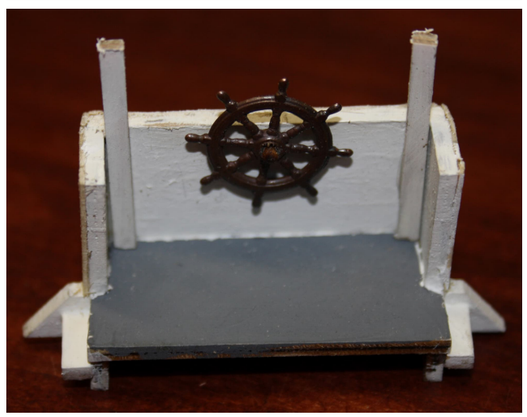


21.0 Wheel House

Identify the wheel house parts P53, P54, P55, P56 & P57. Assemble the wheel house as shown. Identify P58 - cut two lengths as the wheel house posts - fit in place - fractionally adjust height and glue in place. Plank external sides of wheel house with P39 and fit name plate P76 as shown. Paint inside of wheel house and use a brass nail P83 to fix in helm P60 in place as shown.



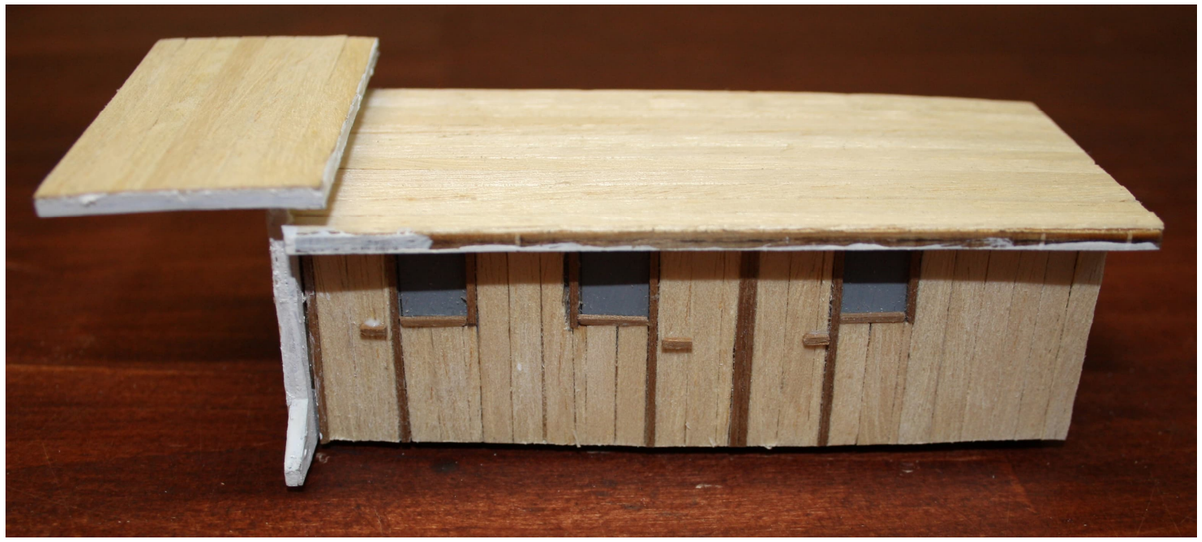


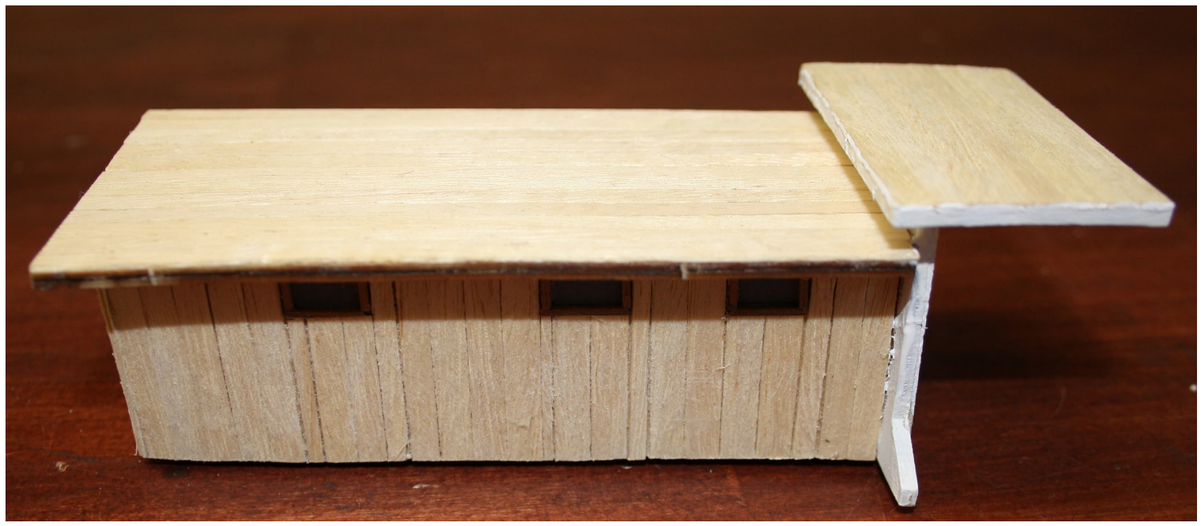


22.0 Upper Deck Cabins

Identify the upper deck cabin parts P61, P62, P63, P64, P65 & P66 Assemble as shown. Paint windows light grey. Cut lengths of the plywood strips P67 as trim around the windows and doors - use walnut wood stain to colour the strips - glue in place. Use P39 birch timber to plank the external surface as shown.

Paint underside of wheel house roof and underside of deck cabin roof white.





Murray River Paddle Steamer ISABELLA 1912

SHEET 9

Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©

23.0 Fit Wheel House & Upper Deck Cabins

Fit the wheel house and upper deck cabins in place on the upper deck as shown.

Cut lengths of the plywood strips P41 as trim around the base of the wheel house and cabins - use walnut wood stain to colour the strips - glue in place.

Use P58 as a trim to fit around the edge of the upper deck cabins roof. Paint white.

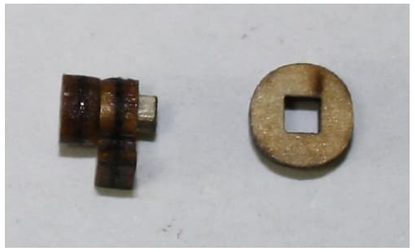
Identify the boat lights P68, P69, P70 & P71. Assemble as shown. Paint and locate on wheel house roof as shown.

For the steam engine stack cut a 30mm length of 5mm dowel P25 and paint black. Align the stack along the centre line of the deck cabins roof and with the stack on the engine below. Fix in place.

Fit eye pins P72 to the corners of the upper deck roof and the stack as shown. Use 0.25mm cord P73 as support ties for the stack.

Identify P58 and fix as a trim around the edge of the upper deck. Paint white.









24.0 Life Buoys & Ladder

Identify the life buoys P78. Paint the name black first and then carefully paint the life buoy white. Fix in place central to the fore face of the paddle wheel houses.

Identify the ladder parts P79 and P80.

Assemble the ladder, paint white and fix in position as shown.





25.0 Rudder

Identify the rudder P81. Paint white. Identify the rudder hinges P82. Fix hinges to rudder and hull using super glue. Use the heads only of brass nails P83 to simulate fixing of rudder hinges. Fit an eye pin P72 to the top rear edge of rudder as shown.



Murray River Paddle Steamer
ISABELLA
1912
SHEET 10

26.0 Bollards
Identify the bollards P84. Paint white. Fix the bollards in place on the main deck fore & aft as shown.

27.0 Main Deck Trim
Identify P58 as a trim to fit around the edge of the main deck. Paint white.

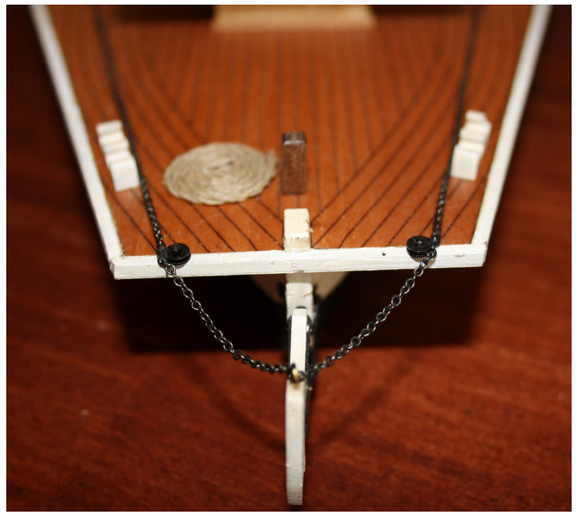
28.0 Steering Chain
Identify the steering chain P85 and the pulley wheels P86. Fix two pulley wheels on the aft trim as shown. Fit another two pulley wheels at the rear edge of the paddle wheel housings as shown. Drill a 3mm hole into the base of the crew quarters as shown.

Take the length of chain and attach its mid-point to the eye pin on the rudder. Then run the remaining length of chain on each side around the two pulley wheels and into the pre-drilled hole. Place a dab of glue on each pulley wheel to hold the chain in place.

29.0 Sampson Posts
Identify the Sampson posts P 87 - use walnut wood stain to colour the strips. Fit the fore sampson post 15mm behind the stem post and on the centre line of the deck. Place the stern sampson post 10mm in front of the stern post.

30.0 Rope Coils
Identify 1.5mm fawn cord P88. Cut length in half and make two rope coils. Fix as shown .

31.0 Upper Deck Stanchions
Identify the stanchions P89. Fix in place around edge of upper deck as shown. Fit 0.25mm cord P73 through the stanchion holes starting and finishing on either side of the ladder steps.



32.0 Fore Hatch
Identify the hatch base P90. Use P58 as a trim to fit around the edge of the hatch. Paint the trim white. Fit the hatch in place as shown.

33.0 Flag
Identify the length of 2mm dowel P91. Cut the dowel to 60mm and paint white. Fit an eye pin P72 at the top and base of the pole. Identify the flag P92 - Sheet 13 - cut out and attach the flag to a length of 0.25mm cord P73 and tie off to the eye pins as shown. Fix the flag pole to the stem post as shown.





Murray River
Paddle Steamer
ISABELLA
1912
SHEET 11

Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©

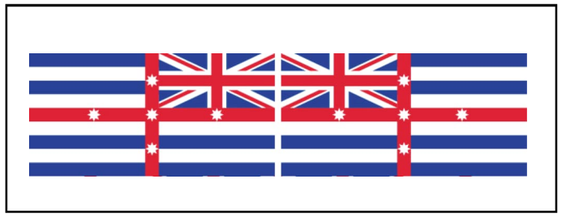
34.0 Finishing Touches

Fit the *Isabella* name plates P76 to the paddle wheel lattice. Review your whole model and make any fine adjustments or touches of paint. Spray the whole model with a couple of coats of clear matt or satin polyurethane varnish. You are now ready to mount and display your model.



Murray River Paddle Steamer
ISABELLA
1912
SHEET 12

Modellers Shipyard - Murray River Paddle Steamer *Isabella* 1912 Building Instructions V3.1 Copyright 2025 ©



P92 Murray River Flag

Murray River
Paddle Steamer
ISABELLA
1912
SHEET 13

BLANK