**Third Section of the Hull**

**Parts in this issue**

- **15A** Ventilation duct
- **15B** Lifeboats A and B
- **15C** Third hull section (port side)
- **15D** Angled screwdriver
- **15E** Allen key for hex screws
- **JM** Three PM screws (1 spare)
- **IM** Five PWM screws (1 spare)
- **MM** Five pan head hex screws (1 spare)

**Note:** The Allen key and hex head screws are packed in a separate bag. Two of the hex head screws will be used in issue 18.

1. Take the officers' quarters assembly from the previous issue. Identify the supports on the port side for lifeboat B (15B) and check the fit. Apply a little glue to the supports and stick the lifeboat in place. Repeat to fix lifeboat A (15B) in place on the starboard side.
2 Take the hull assembly from issue 10 and the keel section 13A, supplied with issue 13. Fit the keel section against the forward keel section 10A, as shown. Fix the parts together with two IM screws (supplied with issue 13).

3 Fit the third port hull section 15C along the port side of the keel section 13A, as shown. Fix in place with four IM screws.
At the forward end of the hull section 15C a raised screw socket aligns with screw holes in the connecting panel 4C. Using two MM hex screws, and the Allen key 15E, fix the parts together at the points circled in yellow. The angled screwdriver 15D may be useful in future issues when you have to tighten crosshead screws in places that are difficult to access.

**Completed work**

Boats have been fixed in place on the deck above the officers’ quarters and two more parts have been fitted to the hull. The ventilation duct 15A and two MM screws will be fitted in a future issue. Store all the parts carefully until they are needed. The JM screws supplied with this issue are not needed.
As described in previous issues, check how the decking **16F** fits on the superstructure **16E**. Carefully remove the backing from the decking and stick the decking firmly in place on the superstructure, checking that all the holes are aligned. Smooth the decking down along the grain with a soft cloth.
2 Take the swan-neck vent 16C and fit the pegs into the holes in the deck. Note that one peg is larger than the other (yellow arrow). Glue is not necessary, but it may help to hold the ventilator securely on the decking.

3 Similarly, fit the cowled vent 16A in the holes in the decking, beside the grey area. Again, one peg is larger than the other so ensure that you fit the vent facing the correct way (yellow arrow). Glue is not necessary, but it may help to hold the ventilator securely on the decking.
4 The second cowled vent 16B fits into the holes between the stairwell and the grey area of the superstructure. Make sure you fit the larger peg into the larger hole (yellow arrow).

Completed work

Work has started on the section of the superstructure where the second funnel will be mounted, next to the skylight over the first-class stairwell. The first-class gym is next to the grey area where the funnel will be positioned, on the starboard side of the boat deck.

Store the ventilator hood 16D carefully until it is needed.
**The Second Funnel**

**Parts in this issue**

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17A</td>
<td>Funnel interior</td>
</tr>
<tr>
<td>17B</td>
<td>Funnel plating</td>
</tr>
<tr>
<td>17C</td>
<td>Tank</td>
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<tr>
<td>17D</td>
<td>Filter</td>
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<tr>
<td>17E</td>
<td>Spring</td>
</tr>
<tr>
<td>17F</td>
<td>Stay collar</td>
</tr>
<tr>
<td>17G</td>
<td>Smoke generator holder</td>
</tr>
<tr>
<td>DP</td>
<td>Seven PB screws (1 spare)</td>
</tr>
</tbody>
</table>

**Step-by-Step Instructions**

1. Take the filter **17D** and the spring **17E**. Insert the prong on the spring into the centre of one end of the filter, and push it in as far as possible.

2. Insert the filter and spring assembly into the open end of the tank **17C**: the spring **17E** is inserted first. The spring means that the end of the filter **17D** extends slightly from the end of the tank (inset left) but the filter can be pushed into the tank.
Take the funnel interior 17A and fit the funnel plating 17B around it. Note that there are slits in the plating that have to be matched with a slot on the funnel (circled in blue). Ensure that the screw holes are aligned. Fit three DP screws on one side of the ‘seam’ (above). Then fit the three remaining DP screws, ensuring that the slits are still aligned (left).

**Completed work**

Work has started on the assembly of the second funnel. Store all the parts carefully as work on the funnel will continue in a future issue.
The Dome Over the First-Class Stairwell

1. Take the dome 18B for the forward first-class stairwell and fit it on the superstructure 16E from issue 16, as shown.

Parts in this issue:
- 18A Third section of the hull (port side)
- 18B Dome
- 18C Skylight
- JM Three PM screws
- AM Two PM screws (1 spare)
- IM Four PWM screws (1 spare)
The skylight 18C fits over the stairwell so that the edges of the skylight match the rim of the opening, indicated by the dotted line (left). Position the skylight, as shown below, but do not glue it at this stage. You can use a little masking tape to hold it in place temporarily so that you do not lose it.

Take the hull assembly from issue 15 and the third section of the hull 18A. Check the fit of part 18A against part 15C, ensuring that the holes are aligned (circled). Fix part 18A in place using three IM screws.
The forward edge of the hull section 18A has two screw sockets, which align with screwholes in the connector 4C. Fix the parts together using two MM screws, supplied with issue 15; you will need to use the Allen key supplied with issue 15.

Finally, use an AM screw to fix the end of the port top strip of the forecastle to the upper edge of the hull section 18A.

**Completed work**

Another section has been fitted to the hull, and the dome and skylight have been positioned over the opening for the first-class stairwell.
Insert the smoke generator 19M into the holder 17G. Note the wires are attached to the upper side of the generator in this view (red arrow, right) and fit through a recess in the edge of the holder (circled in blue, far right).

**NOTE:** In this issue, we complete the assembly of the second funnel from issue 17, and add details to the first funnel, issue 11. You will also need the superstructure assemblies from issues 14 and 16.

**PARTS IN THIS ISSUE**

- 19A Forward steam escape pipe for funnel (x 2)
- 19B Aft steam escape pipe for funnel (x 2)
- 19C Grille x 2
- 19D Second funnel interior
- 19E Whistles with steam supply pipe (x 2)
- 19F Ladder (x 2)
- 19G Water pipe (A) for first funnel
- 19H Water pipe (A) for second funnel
- 19I Water pipe (B) for first funnel
- 19J Water pipe (C) for first funnel
- 19K Water pipe (D) for first funnel
- 19L Platform (x 2)
- 19M Smoke generator
- 19N Funnel cap
- EP Three PB screws (1 spare)
2. Fit the smoke generator assembly (19M and 17G) into the funnel interior 19D (right) and fix it in place with two EP screws (far right).

3. Take the tank assembly from issue 17 and insert the open end with the filter into the holder 17G (right). Leave the tank empty; it will be filled with water at a later stage.

4. Fit the stay collar 17F on the funnel cap 19N, as shown in the middle photo (left). The tabs (circled) are different sizes, and fit into the different sized slots in the funnel cap. Also, the side of part 17F that is uppermost in these photos is more detailed. Do not use any glue.
5. Fit the funnel cap 19N in the second funnel (assembled in issue 17). Three holes in the funnel cap (yellow circle) align with the ‘seam’ in the funnel plating 17B. Push it firmly in place. Fit the smoke generator, tank and funnel interior assembly into the top of the funnel. Ensure that the cable threads through the square hole in the funnel base (below). You may find it helpful to use tweezers to pull the cable through. You do not need to glue the parts.

6. Fit a grille 19C in the top of the funnel. Do not glue the grille in place as it has to be removed when you need to fill the tank. Hold it in place with a little masking tape to ensure it does not get lost.

7. Take one of the aft steam escape pipes 19B (they are shorter than the forward steam escape pipes 19A) and check how it fits down the aft side of the funnel. Apply a little superglue to the pegs on the duct to fix it in place.
Take a platform 19L and fit it over the seam on the front of the funnel; a tab on the platform fits into the slot in the funnel plating 17B (as shown, far right). Use a little superglue to hold the tab in place.

Holding the platform 19L in place, check the fit of a forward steam escape pipe 19A over the seam in the plating. When you are happy with the fit, apply a little glue to the pegs on the pipe and fix it in place so that the platform is held securely in position (left).

Take one of the steam supply pipes with whistles 19E and check the fit on the outside of the forward steam escape pipe 19A. Apply a little glue to the pegs on part 19E and fix in place.
11 Take one of the ladders 19F and check the fit over part 19E: the long pegs on the ladder fit into the small holes on each side of the seam in the funnel plating (below). Apply a tiny amount of superglue to the eight pegs and fix the ladder in place.

**TIP** You may find there is excess material on the ends of the pegs, from the moulding process. Trim away with a sharp craft knife if necessary.

12 Take the first funnel, assembled in issue 11. In the same way as described in steps 7 to 11, fit the remaining set of funnel details in place (steam escape pipes 19A and 19B, platform 19L, whistles and pipe 19E and ladder 19F).

13 Take the first class gym and stairwell, assembled in issue 16. Fit the water pipe (A) 19H into the holes in part 16E (circled) at the base of the second funnel. The pipe leans towards the stern, as shown (left). Do not glue at this stage.
Completed work

Assembly of the second funnel has been completed. Steam escape pipes and other details have been added to both funnels and pipes have been fitted to two sections of the superstructure. The second funnel grille 19C will be fitted in the next issue.

14 Take the officers’ quarters assembly from issue 14 and the four remaining water pipes. The pipes are fitted into part 14G. Fit pipes 19G and 19K first (towards the bow, circled in red, above left) and then pipes 19I and 19J (circled in yellow, above). Again, the pipes lean towards the stern (left). Do not use any glue at this stage.
**The First LED Lights**

1. Take the ventilator hood 16C supplied with issue 16. Cut one of the grilles A (20H) from the frame and check the fit inside the rim of the hood. Apply a tiny drop of superglue to the corners of the hood 16C, inside the rim (circled), and fix in place.

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**PARTS IN THIS ISSUE**

<table>
<thead>
<tr>
<th>Part</th>
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</tr>
</thead>
<tbody>
<tr>
<td>20A</td>
<td>Connecting cable for the first funnel (K1)</td>
</tr>
<tr>
<td>20B</td>
<td>LEDs and circuit board (J1)</td>
</tr>
<tr>
<td>20C</td>
<td>Boiler room vent hood</td>
</tr>
<tr>
<td>20D</td>
<td>Decking</td>
</tr>
<tr>
<td>20E</td>
<td>Cowled vent</td>
</tr>
<tr>
<td>20F</td>
<td>Antenna holder</td>
</tr>
<tr>
<td>20G</td>
<td>Hatch (x 2)</td>
</tr>
<tr>
<td>20H</td>
<td>Grille A (x 2)</td>
</tr>
<tr>
<td>20I</td>
<td>Grille B</td>
</tr>
<tr>
<td>20J</td>
<td>Grille C</td>
</tr>
<tr>
<td>20K</td>
<td>Swan-neck vent (x 2)</td>
</tr>
<tr>
<td>20L</td>
<td>Plastic band</td>
</tr>
<tr>
<td>AP</td>
<td>Three PB screws (1 spare)</td>
</tr>
</tbody>
</table>

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**Materials Required:**

- Connecting cable for the first funnel (K1)
- LEDs and circuit board (J1)
- Boiler room vent hood
- Decking
- Cowled vent
- Antenna holder
- Hatch (x 2)
- Grille A (x 2)
- Grille B
- Grille C
- Swan-neck vent (x 2)
- Plastic band
- Three PB screws (1 spare)
2 Fit the ventilator hood 16C in place on the stairwell superstructure 16E as shown. Apply a little glue to the pegs on the base of the hood to fix it in place.

3 The decking 20D fits in the space in front of the base of the first funnel, on the superstructure of the officers’ quarters 14G. Remove the backing and fix in place, ensuring that the holes are aligned.

4 Take the LED strip J1 (20B) and plug it into the socket labelled MOT/LED on the circuit board on the tester supplied with issue 3 to check that it works, then disconnect it again. Fit the LED strip 20B inside the officers’ quarters 14G. The LEDs fit into the holes indicated by the arrows. Note the position of the shaped end of the circuit board, inside ribs at each end on the inside of the superstructure (dotted lines, below right). Insert one edge of the J1 circuit board under the two tabs highlighted by the blue circles.
5 Turn the assembly over and use the tip of a flat screwdriver, to very gently ease the other two tabs over the edge of the circuit board to hold it in place. Connect to the tester again to check that the LEDs are working, then disconnect again.

6 Take the two ventilator hoods 14B and 20C. Cut the grilles 20J and 20H from the support. Check the fit of 20J on hood 14B and 20H on 20C. Apply a little glue inside the rim of the vents to fix the grilles in place. The two hoods fit fore and aft of the funnel fixing point on the officers’ quarters 14G. Glue them in place.
7 Remove the two hatches 20G from the frame. Use a pair of long nosed pliers to grip one half of one of the hatches (above right) and bend it so that the angle matches the angle of the top of the hatch openings on the deck near the ventilator hood 20C (above far right). Repeat to bend the second hatch. Glue the hatches in place (right).

8 Take the cowled vent 20E and fit it into the holes on the deck near the ventilator hood 14B, as shown (right).
9 The antenna holder 20F fits in the hole in the square raised panel in the decking, near the hatches. Note the orientation, then glue in place.

10 Take the two swan-neck vents 20K and identify the fixing points at either end of the lifeboat on the starboard side of the officers' quarters. One peg on each of the vents is larger than the other to ensure they are fitted the right way round. Fix in place as shown (below). Use a little superglue to hold them in place if necessary.
11 Take the ventilation duct 15A (supplied with issue 15) and fit it in place. The peg at one end fits into the socket in the top of the vent hood 10C and the peg at the other end fits into the hole in the deck.

12 Take the first funnel, with the details fitted in issue 19. Remove the grille from the top of the funnel and take out the interior funnel, tank and smoke generator assembly. Fit the plastic band 20L around the tank, holding the cable in place so that it is taut.
13. Take the connecting cable K1 (20A). Thread the larger connector (socket) up through the first funnel (right). This end will be connected to the smoke generator cable 3S.

14. Thread the other end of the connector cable with the smaller connector (plug) through the hole in the officers’ quarters superstructure 14G. It goes through the hole on the port side. It is a tight fit: feed the socket through with the wider rim (at the top, where the cable is) adjacent to the LED circuit board 20B, where the opening in the superstructure is widest.
15 With the connector cable K1 in position, fit the funnel on the superstructure 14G, as shown. Turn the assembly over so that you can fix the funnel in place with two AP screws.

16 Fit the grille 19C on top of the funnel without using any glue; this replacement grille is a better fit than the grille supplied with issue 11. Hold the grille in place with masking tape if needed.

**Completed work**

The first funnel has been attached to the top of the officers’ quarters, and several vents and other details have been fitted. The smoke generator assembly will be refitted at a later stage, and the white grille 20I will be used in a future issue. Store all the parts carefully.