

# 'G' Class Fleet Destroyer H.M.S. GLOWWORM 1940

Resin & Photo Etched Metal Kit in 1/350 scale

## History

HMS Glowworm had a very short but distinguished career in the Royal Navy, which saw her captain awarded the Victoria Cross. Laid down at Thornycrofts Woolston Yard 15th August 1934 and launched on 22nd July 1935 as HMS Glowworm she was commissioned into service on 22nd January 1936 from where she served in the Mediterranean with the 1st Flotilla at Alexandria until the outbreak of war in 1939, when with the Flotilla she transferred to home waters. Initially she served in the Western Approaches, operating out of Plymouth until early 1940, whilst at anchor in fog off the Dowsing she was struck by the Swedish ship Rex. Sustaining serious damage she underwent repairs until March after which she rejoined her flotilla at Scapa Flow prior to taking part in the Norwegian campaign. Whilst part of the escort screening the Battlecruiser HMS Renown, during the Norwegian campaign, Glowworm lost a man overboard during the night of the 7th-8th April 1940 off the Norwegian coast. She stopped to pick him up and became separated from the rest of the force. At about 8.30 am on the 8th April she reported that she had been engaged with an enemy destroyer then a 'Superior force'. What had happened was that she had come across the German Destroyer Escorts of the Heavy Cruiser Admiral Hipper, which appeared shortly after. Glowworm was caught up in a running fight, seeing the German destroyers break off, she concentrated on the Hipper. She launched her torpedoes but they missed and Glowworm was taking several hits from Hipper's larger guns. Glowworm's Captain, Cdr Gerard Roope decided that there was no alternative but to try and ram the Hipper which under a hail of fire from the larger ship, Glowworm was pushed under the bow of the cruiser. Her entire focsle was sheared off back to the bridge, but the Hipper also had serious damage inflicted with a large gash underwater at the bow. Glowworm capsized and sank a few minutes later only 37 survivors being found and picked up by the Hipper. Cdr Roope was not among them, he had perished when Glowworm sank. He thus became the first recipient of the Victoria Cross for Gallantry of the Second World War, and made partially upon the recommendations made through the Red Cross by the Captain of the Admiral Hipper, Captain Zur See Hellmuth Heye.

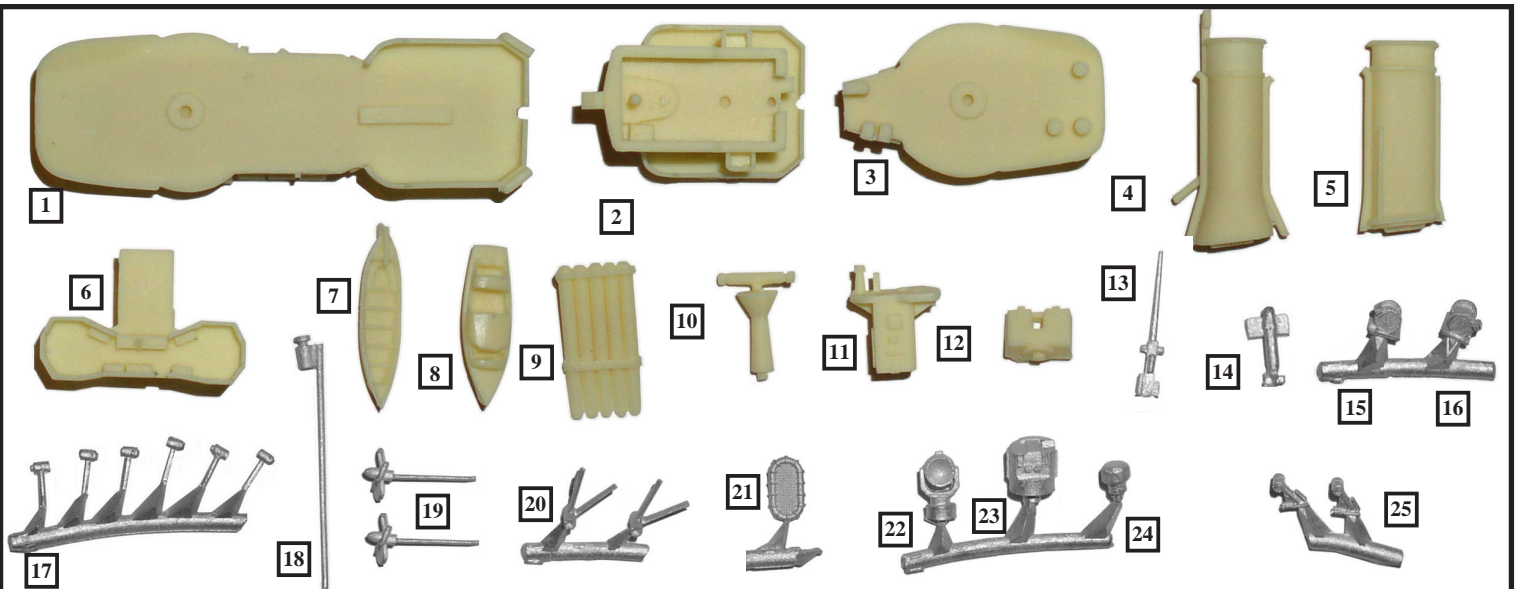
## Specifications

Length 323 ft/ 98.45 mtrs overall. Beam 33 ft/ 10.5 mtrs. Displacement 1350 tons / 1376 tonnes standard. 1854 / 1883 full load.  
 Range 5,530 nautical miles at 15 knots Complement 145 Officers and Men

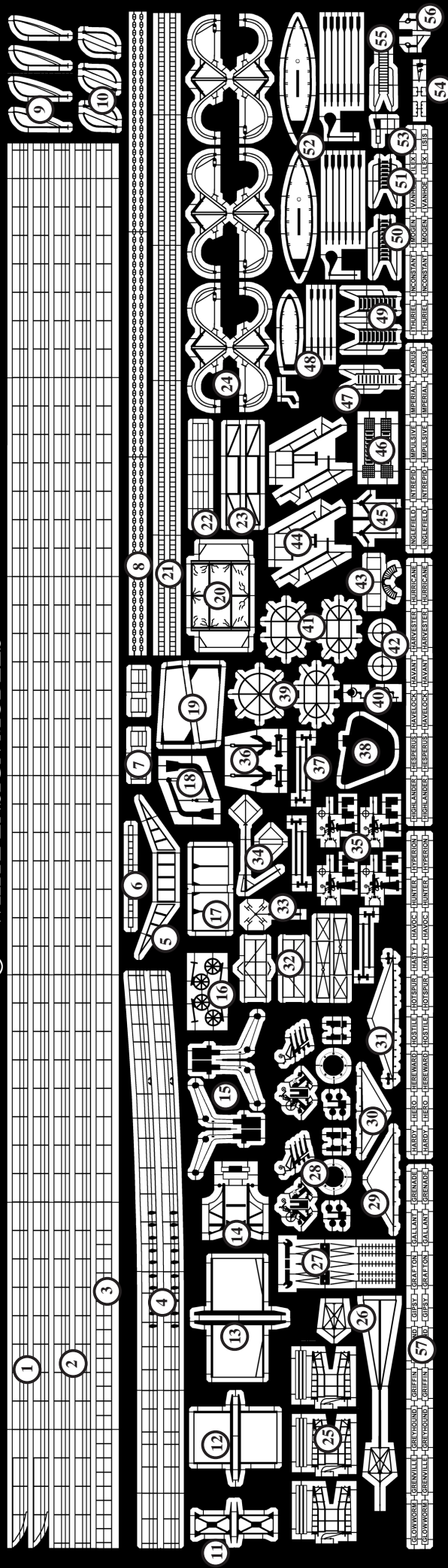
## Armament

Four Single 4.7 inch QF Mk IX mountings Eight 0.5 inch Vickers Machine Guns in 2 Quad Mountings  
 Ten 21 inch Torpedoes in 2 Quintuple Mountings Two Depth Charge Throwers with 6 Reloads

## Resin and Metal Parts Identification



- |                             |                                  |                                  |
|-----------------------------|----------------------------------|----------------------------------|
| 1. Forward Superstructure   | 9. Quintuple Torpedo Tubes x 2   | 18. Foremast Pole & Crows Nest   |
| 2. Bridge & Signal Platform | 10. Rangerfinder Mounting        | 19. Propellers & Shafts          |
| 3. Aft Superstructure       | 11. Searchlight Platform         | 20. Propeller 'A' Frames         |
| 4. Forward Funnel           | 12. 4.7" Gun Shields x 4         | 21. Carley Rafts x 4             |
| 5. Aft Funnel               | 13. 4.7" Gun Barrel x 4          | 22. Searchlight Projector        |
| 6. Midships AA Gun Platform | 14. TSDS Paravane x 2            | 23. Director Control Tower (DCT) |
| 7. 27' Whaler x 2           | 15. TSDS Winch (Starboard)       | 24. Asdic Dome                   |
| 8. 25' Motor Boat           | 16. TSDS Winch (Port)            | 25. Depth Charge Throwers x 2    |
|                             | 17. Depth Charge Thrower Reloads |                                  |



1. 3 Bar Railing with Hull Step Curve
2. 3 Bar Railing Stock
3. 2 Bar Railings
4. Upswept Focle Railings
5. Breakwater
6. Bridge Windscreen
7. Hull Step Railings
8. Anchor Chain
9. Depth Charge Davits
10. Loading Davits
11. AA Gun Platform Supports
12. Signal Platform Supports (Havelock)
13. Signal Platform Supports (Glowworm)
14. Stern TSDS Frame
15. TSDS Gear Davits
16. TDSD Winch Brake Wheels
17. Carley Raft Rack Supports
18. Torpedo Loading Davits
19. Tripod Main Mast Frames

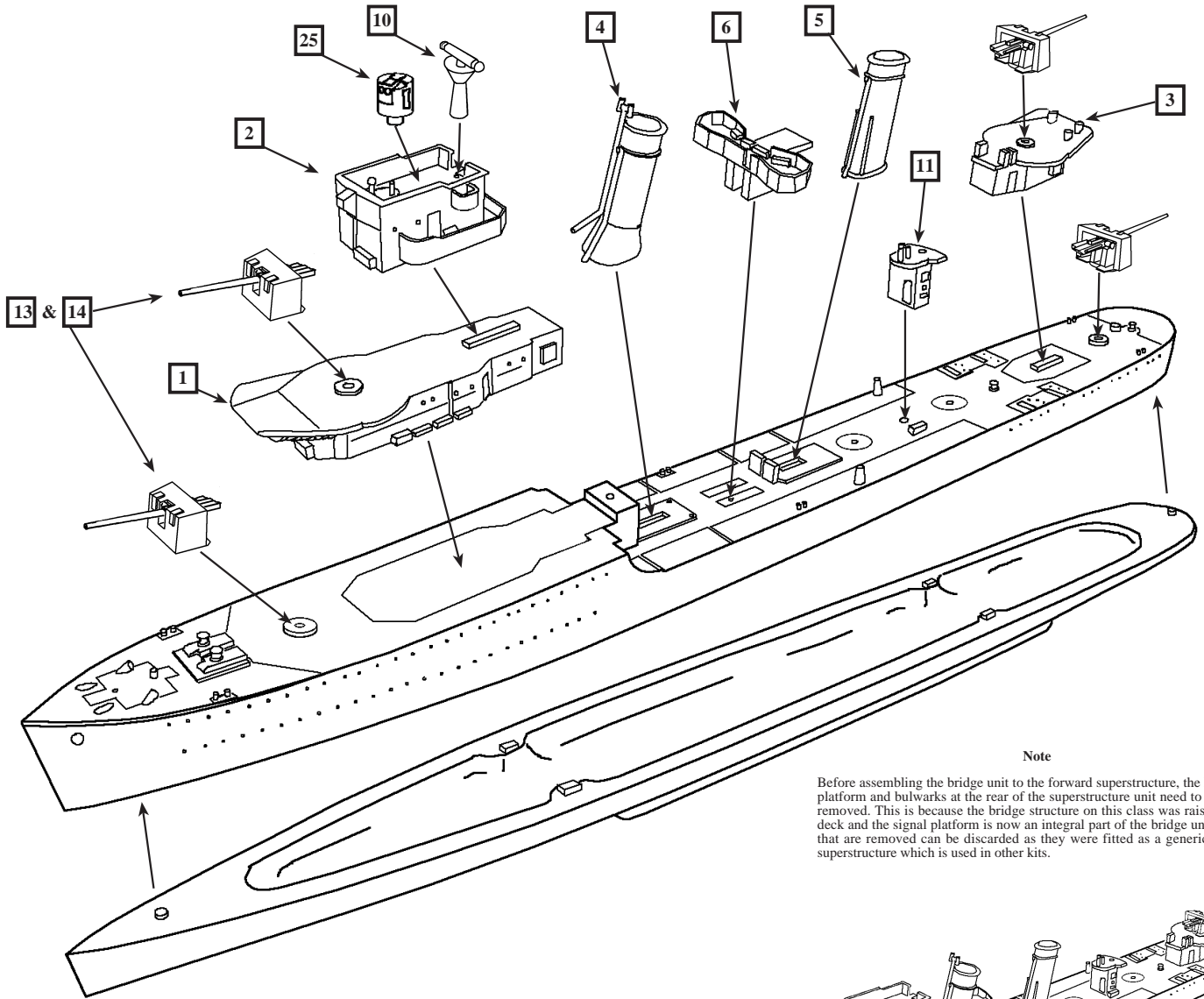
20. Bridge Roof Awning
21. Vertical Ladder Stock
22. Rangefinder Platform Railing
23. 12 pdr Gun Platform Supports
24. Boat Davit Assemblies
25. Depth Charge Stern Rails
26. Tall HF/DF Antenna Mast
27. 285 Guntery Radar Antenna
28. 0.5" Quad Machine Gun Mountings
29. Main Mast Yardarm
30. Fore Mast Upper Yardarm
31. Fore Mast Lower Yardarm
32. 286 Radar Antenna Assembly
33. 291 radar Antenna
34. Diamond HF/DF Antenna
35. Single 20mm Oerlikons
36. Anchors
37. Stove Pipes
38. Rudder

39. Funnel Cap Grills (Glowworm)
40. Signal Lamps
41. Funnel Cap Grills (Havelock)
42. Searchlight Lens Cross
43. Funnel Siren Platform
44. Accommodation Ladder Rails
45. Bridge Semaphores
46. Accommodation Ladder Steps
47. Inclined Ladder ( Gun Platform)
48. 16' Dingly Fittings
49. Inclined Ladders (Focle Step)
50. Inclined Ladder (Bridge)
51. Inclined Ladder (Signal Deck)
52. 27' Whaler Sea Boat Fittings
53. Aft Superstructure Ladder Landing
54. 25' Motor Boat Fittings
55. Inclined Ladder ( Aft Superstructure)
56. Funnel Sirens
57. 'G' Class Name Plates

**General Precautions**

When assembling a Resin / Photoetched metal kit, certain precautions must first be taken.  
 1. Resin dust can be harmful if inhaled. It is recommended that you wear a suitable dust mask when drilling or sanding resin parts.  
 2. Cyano adhesives (super glues) are generally used to assemble this type of kit. Care must be taken when using this type of adhesive as it will bond in seconds. Follow the advice on the container.  
 3. Wash resin parts in a solution of warm soapy water before assembly. This will remove any residual mold release agents and ensure a good key for painting.  
 4. Soak photoetch parts in a suitable solvent, such as white spirit, to degrease the surfaces prior to painting.

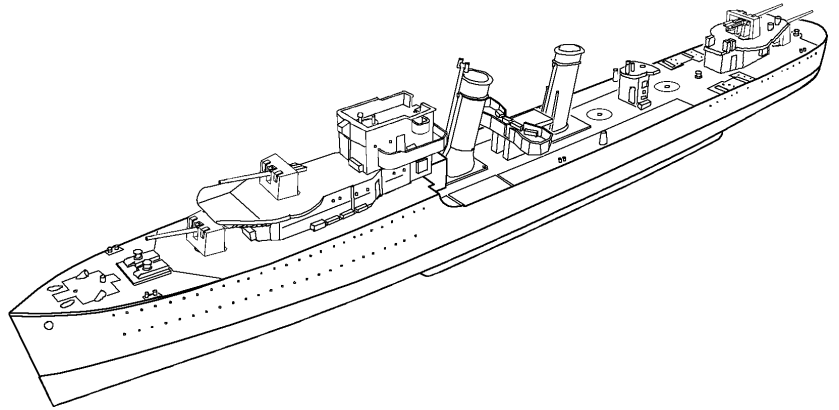
## Main Parts Location Diagram



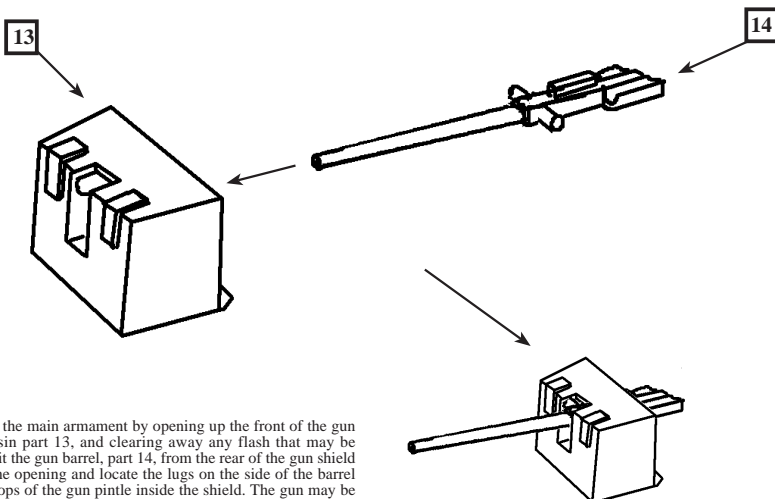
### Note

Before assembling the bridge unit to the forward superstructure, the lower signal platform and bulwarks at the rear of the superstructure unit need to be carefully removed. This is because the bridge structure on this class was raised by half a deck and the signal platform is now an integral part of the bridge unit. The parts that are removed can be discarded as they were fitted as a generic part to the superstructure which is used in other kits.

This is a general overview of the major parts in the kit and their positions in relation to each other. It may be found to be easier to complete some of the sub assemblies before fitting into the position on to the hull or superstructure. If the kit is to be made as a full hull model, it is recommended that the upper and lower hulls be joined first of all. Then any joint line may be filled and smoothed before adding any of the details.

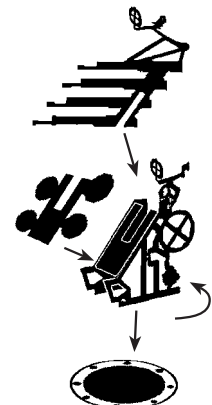


### 4.7" Single Gun Mounting Assembly



Assemble the main armament by opening up the front of the gun shield, resin part 13, and clearing away any flash that may be present. Fit the gun barrel, part 14, from the rear of the gun shield through the opening and locate the lugs on the side of the barrel in to the tops of the gun pintle inside the shield. The gun may be set at whatever elevation required. Make four of these items.

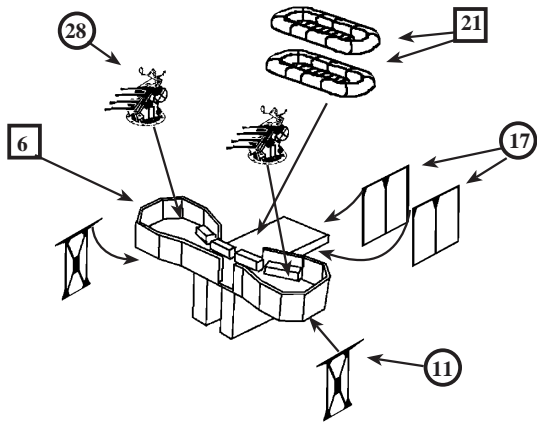
### 0.5" Quad Machine Gun Assembly



(28)

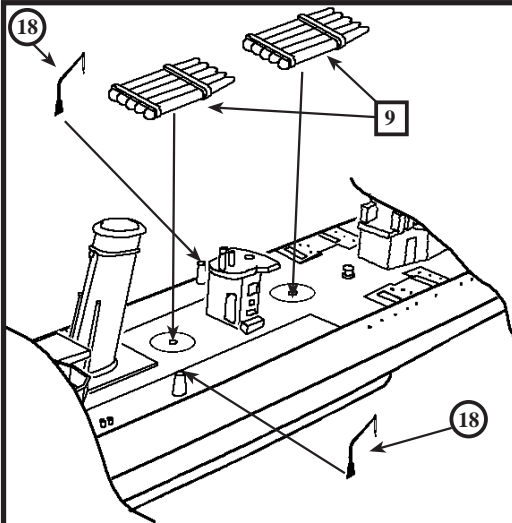
Assemble the half inch quad mounting by folding the side panels of the centre section so that they are parallel. Fix down to circular base. Fit the four offset magazine images so that they match the slot on the centre section. Fit the slot on the barrels section so that it slides over the slot on the centre section, with the barrels facing forwards as shown above. Make two of these.

### AA Gun Platform Assembly



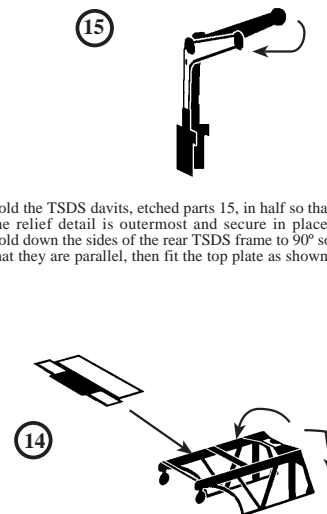
Once the gun platform, resin part 6 has been fitted to the main deck, between funnels, fit the carley raft platform supports, etched parts 17 to the underside of the platform. Fit the gun platform supports, etched parts 11 to the outboard positions under the gun platforms. Fit up to a stack of four Carley Rafts on to the platform as shown above. Fit the two assembled quad 0.5" Machine Gun Mountings to the platform.

### Torpedo Tube Location



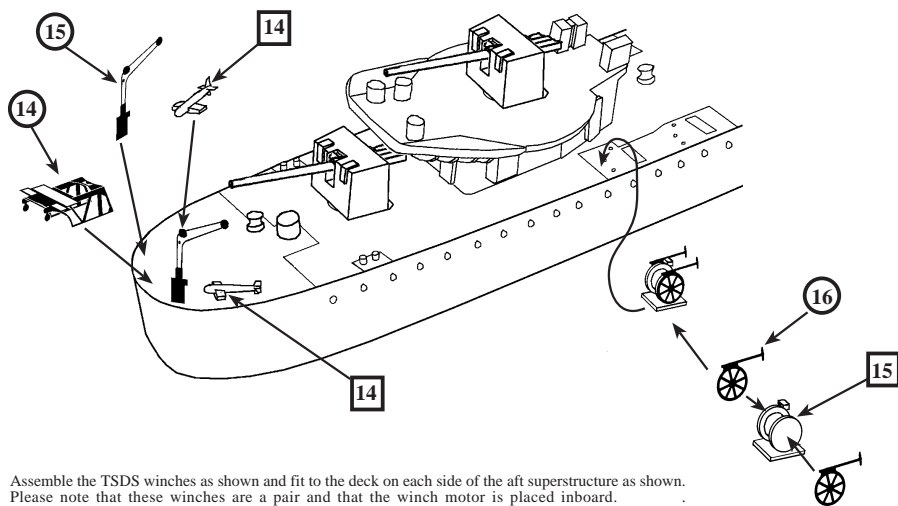
Fit the torpedo tubes, resin parts 9, and the torpedo loading davits, etched parts 18 to the positions each side of the search light platform, as shown above.

### TSDS Rig Assembly



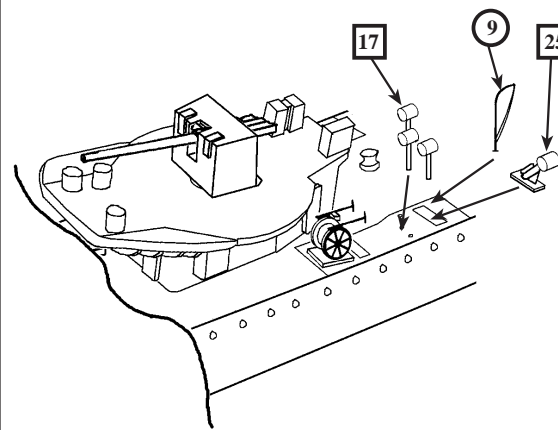
Fold the TSDS davits, etched parts 15, in half so that the relief detail is outermost and secure in place. Fold down the sides of the rear TSDS frame to 90° so that they are parallel, then fit the top plate as shown.

### TSDS Equipment Location



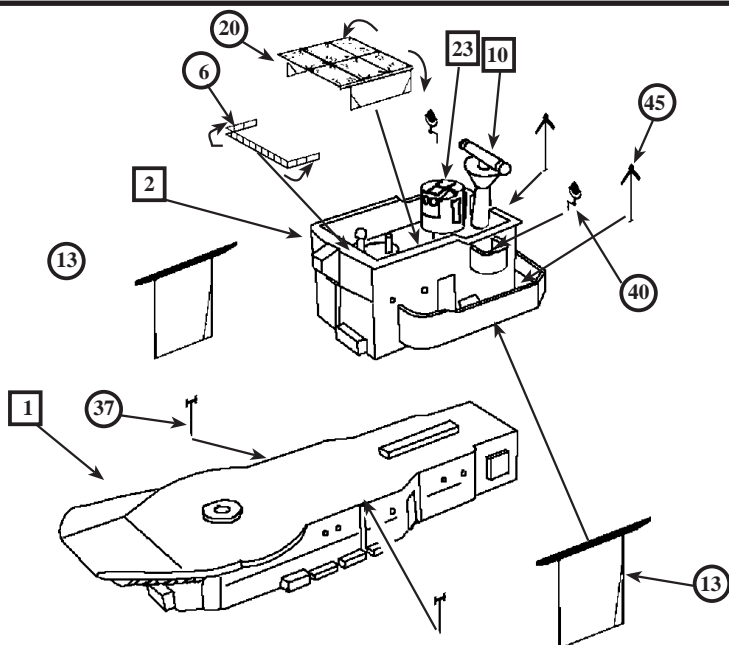
Assemble the TSDS winches as shown and fit to the deck on each side of the aft superstructure as shown. Please note that these winches are a pair and that the winch motor is placed inboard. Fit the TSDS frame, etched part 14, centrally on the stern, then fit the davits, etched parts 15, on each side as shown. Fit the paravanes, metal parts 14, to the deck just below the davit arms.

### Depth Charge Thrower Location



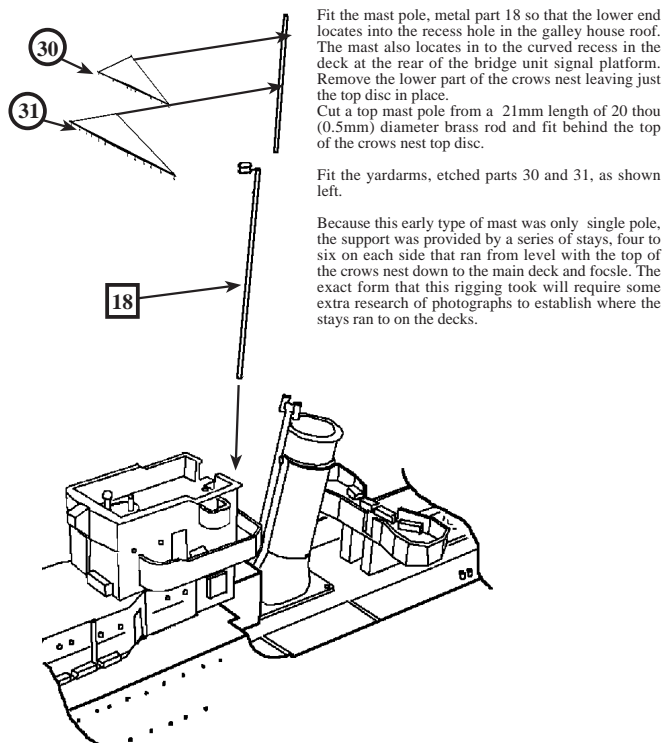
Fit the depth charge throwers, metal parts 25, to the raised molded area on the deck on each side, as shown above. Ensure the throwers are pointing outboard. Fit the reload charges on their rams, metal parts 17, in to the holes in the deck next to the thrower. Fit the loading davits, etched parts 9, as shown.

### Forward Superstructure Fittings



Fit the bridge unit on to the forward superstructure, then fit the signal platform supports, etched parts 13 so that the bottom rail sits on the main deck, and the thicker top bar fits up under the signal platforms. Fold the side frames of the bridge canopy, etched part 20, down to 90°, then fit so that the lower horizontal bars fit along the bridge side combing. This part is optional as this canopy was not always rigged when at sea. Fit the stove pipes to the sides of the superstructure deck as shown. Fit the signal lamps, etched parts 40, to the sides of the small signal platforms on the sides of the bridge. Fit the semaphores, etched parts 45, to the rear of the signal deck on each side. Shape and fit the bridge windshield, etched part 6, to the front of the bridge as shown above.

### Fore Mast Assembly

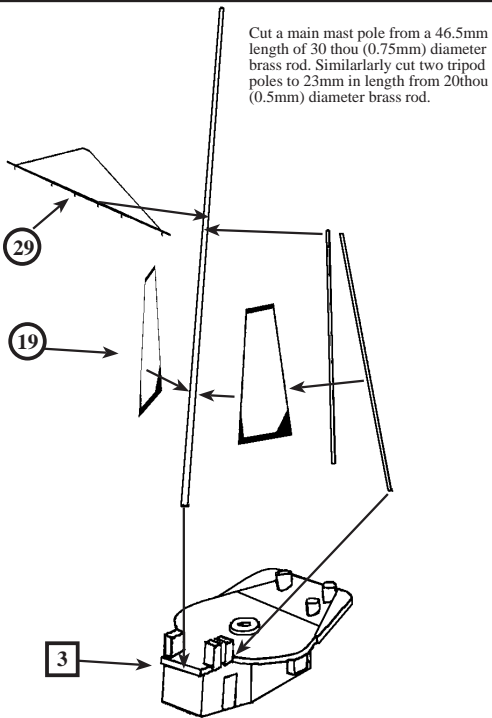


Fit the mast pole, metal part 18 so that the lower end locates into the recess hole in the galley house roof. The mast also locates in to the curved recess in the deck at the rear of the bridge unit signal platform. Remove the lower part of the crows nest leaving just the top disc in place. Cut a top mast pole from a 21mm length of 20 thou (0.5mm) diameter brass rod and fit behind the top of the crows nest top disc.

Fit the yardarms, etched parts 30 and 31, as shown left.

Because this early type of mast was only single pole, the support was provided by a series of stays, four to six on each side that ran from level with the top of the crows nest down to the main deck and focsle. The exact form that this rigging took will require some extra research of photographs to establish where the stays ran to on the decks.

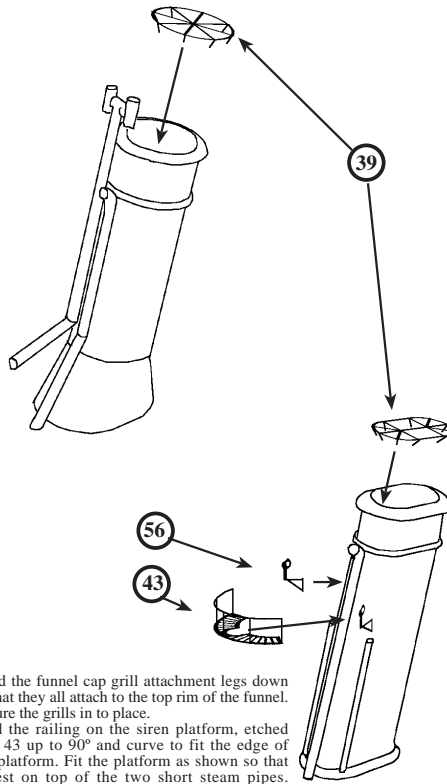
### Main Mast Assembly



Cut a main mast pole from a 46.5mm length of 30 thou (0.75mm) diameter brass rod. Similarly cut two tripod poles to 23mm in length from 20thou (0.5mm) diameter brass rod.

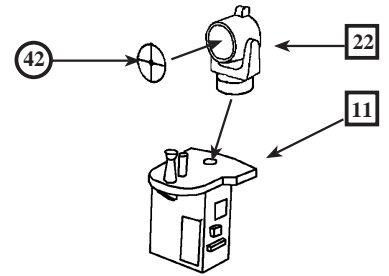
Assemble the main mast pole to the forward end of the aft superstructure deck then fit the tripod pole so that the lower end fit at the start of the curved gun deck extensions. Fit the support frames, etched parts 19, in between the mast pole and the tripod poles. Fit the yardarm, etched part 29, so that the spar fits just above the top of the tripod.

### Funnel Fittings



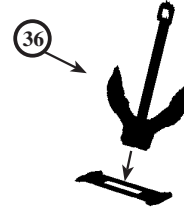
Bend the funnel cap grill attachment legs down so that they all attach to the top rim of the funnel. Secure the grills in to place. Fold the railing on the siren platform, etched part 43 up to 90° and curve to fit the edge of the platform. Fit the platform as shown so that it rest on top of the two short steam pipes. Fit the sirens, 56 just above the platform

### Searchlight Lens



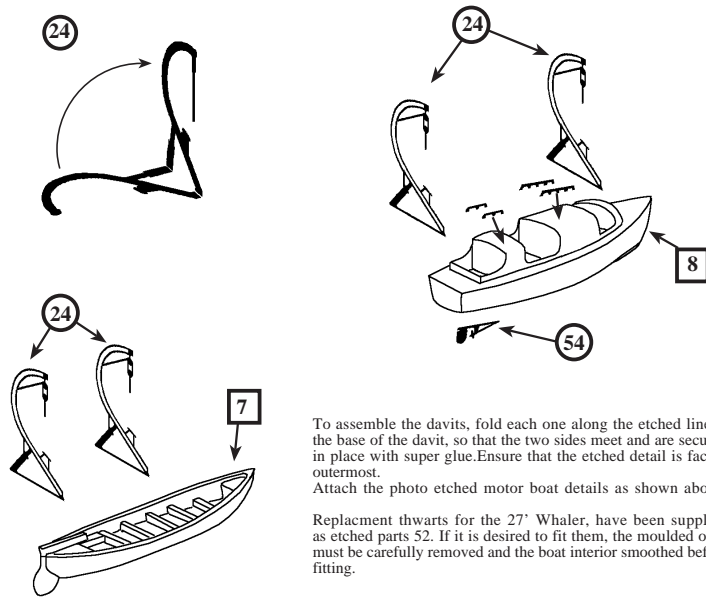
Fit the lens cross, etched part 42, to the front of the searchlight. To get a greater effect from the light, the inside of the lens may be painted with a chrome silver paint. Fit the searchlight to the locating hole in the deck of the platform.

### Anchor Assembly



Assemble photo etched anchors 36 as shown above. Fit anchors into the hawse pipes each side of the bow, after first drilling out the holes with a 1.5mm drill bit.

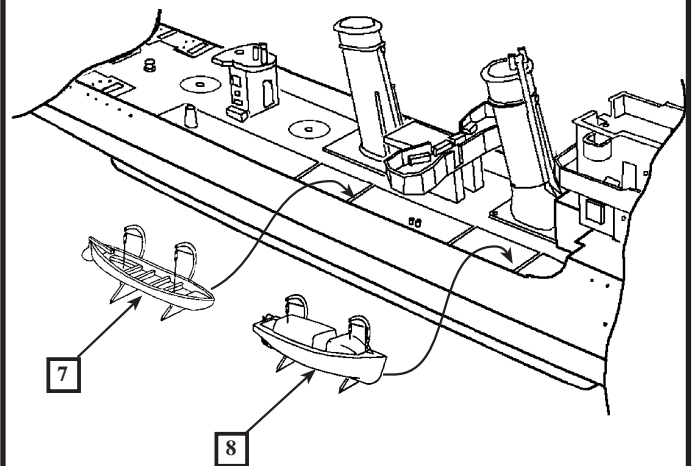
### Boats Assembly



To assemble the davits, fold each one along the etched line at the base of the davit, so that the two sides meet and are secured in place with super glue. Ensure that the etched detail is facing outermost. Attach the photo etched motor boat details as shown above.

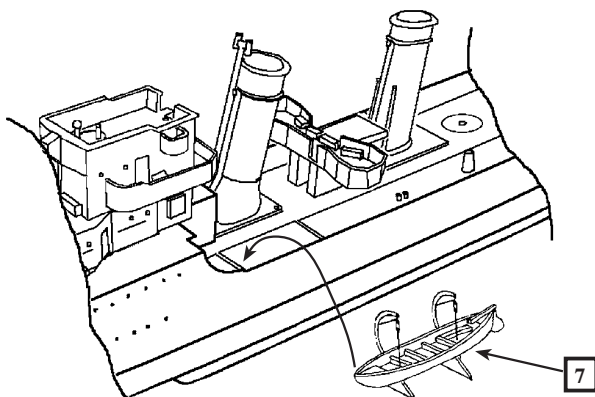
Replacement thwarts for the 27' Whaler, have been supplied as etched parts 52. If it is desired to fit them, the moulded ones must be carefully removed and the boat interior smoothed before fitting.

### Starboard Boats Location



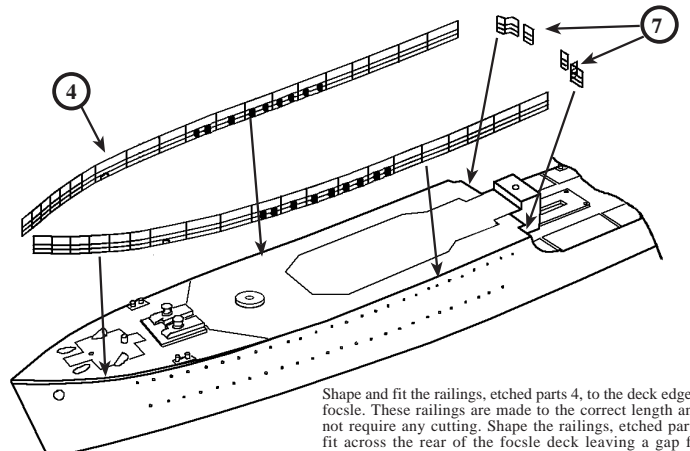
Fit the ships boats into place on the starboard side so that the feet of the davits fit on to the rails moulded on the main deck.

### Port Boats Location



Fit the single 27' Whaler to the port side position so that the feet of the davits fit on to the molded rails on the main deck.

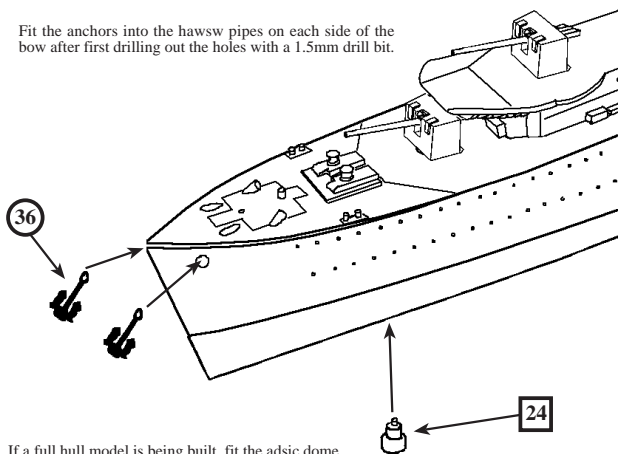
### Fo'c'sle Railings Location



Shape and fit the railings, etched parts 4, to the deck edge of the fo'c'sle. These railings are made to the correct length and will not require any cutting. Shape the railings, etched parts 7 to fit across the rear of the fo'c'sle deck leaving a gap for the access ladders etched parts 49.

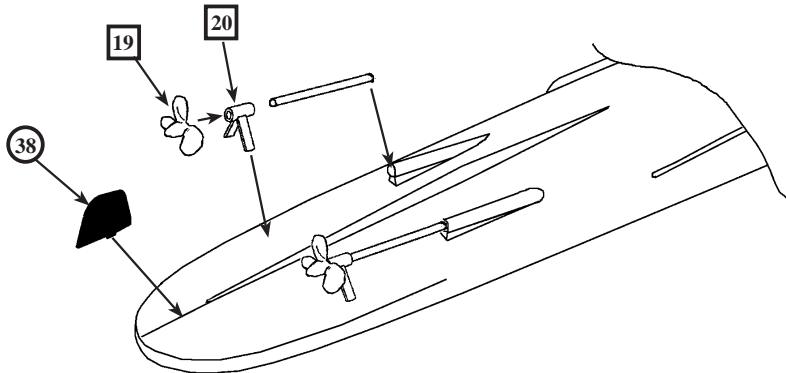
### Anchor Location

Fit the anchors into the hawsw pipes on each side of the bow after first drilling out the holes with a 1.5mm drill bit.



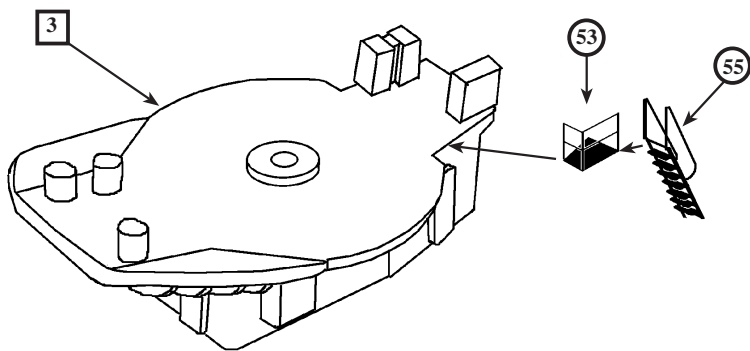
If a full hull model is being built, fit the adisc dome in to the locating hole under the bow.

### Running Gear Assembly and Location



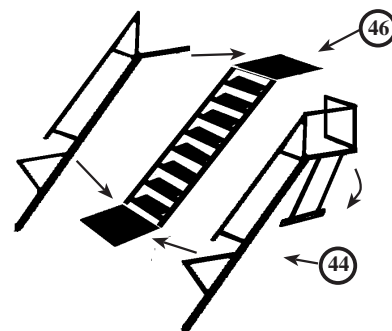
Cut two propeller shafts to a length of 12mm from 40thou (1mm) diameter plastic or brass rod and fit into one side of the propeller 'A' frame, metal parts 20. Fit the propeller 19 to the other side of the 'A' frame. Fit the other end of the shaft in to the recess in the hull fitting then fit the legs of the 'A' frame to the hull. These may require trimming to length to ensure that the propellers sit correctly at the same angle.  
Fit the rudder, etched part 38, centrally to the rear of the lower hull.

### Aft Superstructure Ladder Assembly



A section describing the assembly of this ladder has been included due to its shape and assymmetric location. Fold up the rails on the ladder landing, etched part 53, to 90° and glue at the corner. Fit the landing to the deck edge on the starboard side of the aft superstructure just forward of the curved gun deck extension. Fold the hand rails of the inclined ladder, etched part 55, to 90° so that they are parallel then fit the ladder so the top edge fits against the open side of the landing.

### Accommodation Ladder Assembly

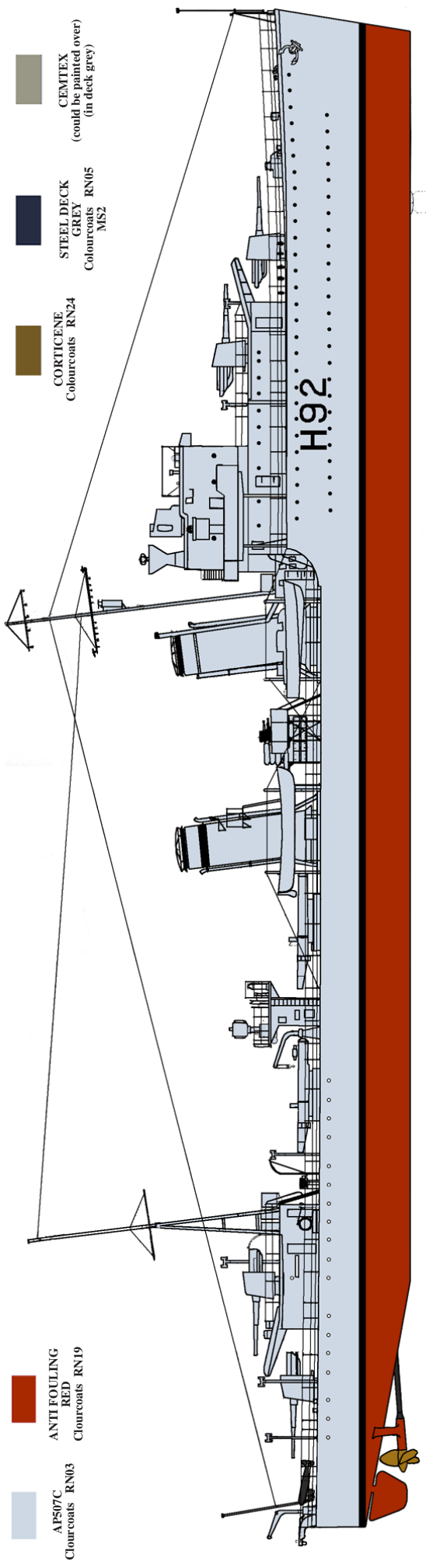


Assemble accommodation ladders as shown above and can be fitted to the ship either side of the main deck, adjacent to the depth charge throwers, if the ship is to be modeled at anchor.

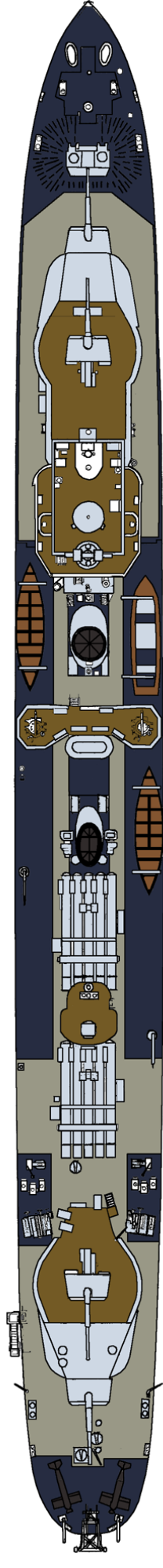
### Other Instructions

1. Some photo etched components have been included on the detail set that are for fitting to other ships of the class in various fits. There fore they will not be refered to in these instructions. These are etched parts 5, 12, 22, 23, 25,26, 27, 32, 33, 34, 35, 41 and 48.
2. Two sections of railing, etched parts 1, have been supplied with one end shaped to fit against the curved fairing at the side of the hull step. The length of this railling varies according to what equipment is fitted on the quarterdeck, so it will require that each section is cut to the desired length from the opposite end to the curve. Standard 2 bar and 3 bar railing stock, etched parts 2 and 3 have been supplied to fit around the edges of superstructure decks and platforms as required.
3. Vertical Ladder stock, etched parts 21, is supplied to be cut to length for fitting against the sides of superstructure components, or to masts and platforms.
4. Inclined ladders are tailored to fit in various locations as follows. Etched part 47 fit from the main deck up to the opening in the front bulwark of gun platform resin part 6. Etched parts 49, fit from the main deck up to the focsle deck at the hull step on each side. Etched part 50 fits from the signal deck to the rear of the bridge. Etched part 51 fits from the galley roof to the signal deck.
5. Name plates, etched parts 57, have been included that cover all the names of the ships in the 'G' class so that others may be modeled if desired. These name plates are in pairs and are fitted mid way up on the sides of the aft superstructure housing.
6. References for ships of this class may be found in publications such as Edgar March's British Destroyers if available. A plan and profile of Glowworm is shown in good detail in the Chatham Blue Print Series publication, British Warships of the Second World War by John Roberts. Historical references can be found in the book Destroyers of World War Two by M.J. Whitley.

COLOUR CHART AND PAINTING GUIDE



HMS GLOWWORM 1935 - 1940



Other colours used are as follows.

**Matt Black** Funnel Caps and Grills, Machine Guns and Light AA Weapons, Hull Boot Topping, Pennant Number, Anchor Chain.

**Bronze.** Propellers.

**Dark Grey.** Paravanes and Depth Charges

**Mahogany or Natural Wood.** Decks and Thwarts of Ships Boats

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