BISMARCK

THE LEGENDARY BATTLESHIP



Pack 03 | Build Instructions

Your 1:200 scale model of the legendary battleship Bismarck is packed with intricate details which precisely replicate every aspect of this state-of-the-art warship. Each piece has been created using premium quality materials to bring maximum enjoyment during your complete build.

In your third model pack, you will assemble:

STAGE 21: FORWARD SECTION OF THE SUPERSTRUCTURE DECK

STAGE 22: THE FOURTH SECTION
OF THE UPPER DECK

STAGE 23: HULL SECTION AND SUPERSTRUCTURE DECK

STAGE 24: THE SUPERSTRUCTURE DECK GROWS

STAGE 25: A HULL SECTION AND LIFEBUOYS

STAGE 26: FORWARD PART OF THE SUPERSTRUCTURE

STAGE 27: HULL SECTION AND NAVIGATION LIGHT

STAGE 28: HULL AND ACCESSORIES FOR THE BRIDGE DECK

STAGE 29: BRIDGE DECK AND LOWER MAST DECK

STAGE 30: HULL SECTION AND RANGEFINDER

STAGE 31: HULL SECTION AND SECOND RANGEFINDER

STAGE 32: HULL SECTION AND ACCESSORIES







Advice from the experts

Spare screws are included with each part. Occasionally, you may be instructed to keep spare or unused screws for a later stage. Keep these spares in a safe place and label them correctly.

Please make sure you don't mix up the screws. They look quite similar, but the threads do vary slightly. Using the wrong screws may damage the parts.

When securing parts together using multiple screws, fit each screw loosely to ensure all the parts are correctly aligned before gently tightening them firmly, but not overtight, in the order in which you placed them.

Your screwdriver can be magnetised by stroking it with a magnet (fridge magnet, etc.) enabling it to hold the screws and make assembly easier.

If a screw is tight going into a metal part, do not force it as you may shear the head off. Remove it and put a tiny smear of Vaseline, soap or light oil on the thread. That will lubricate it and make it easier to drive home.

During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.

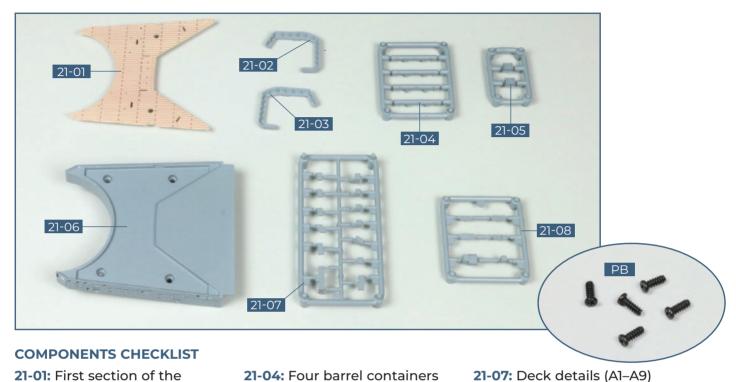


Not suitable for children under the age of 14. This product is not a toy and is not designed for use in play. Keep the parts out of the reach of small children. Some parts may have sharp edges. Please handle them with care.



STAGE 21

FORWARD SECTION OF THE SUPERSTRUCTURE DECK



21-01: First section of the superstructure decking

21-02: Port protective wall

21-03: Starboard protective wall

21-04: Four barrel containers

21-05: Two skylights

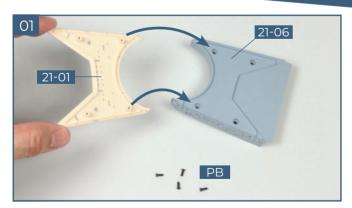
21-06: Forward superstructure deck

PB: Five 2 x 5 mm PB screws

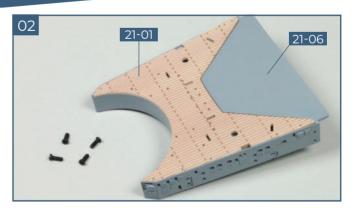
(B1-B6)

21-08: Doors and deck details

01. FORWARD SECTION OF THE SUPERSTRUCTURE DECK

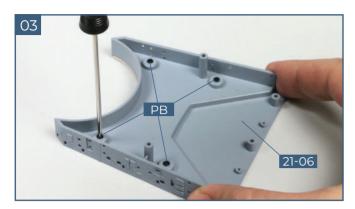


Place the forward superstructure deck 21-06 on the work surface. Position the decking 21-01 on the superstructre deck 21-06 so that the screw sockets align, as indicated by the arrows.

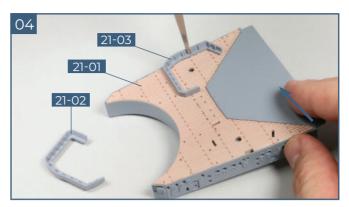


When correctly positioned, the decking is flush with the raised section of the grey superstructure deck 21-06, as shown. You will need four PB 2 x 5 mm screws to fix the decking in place.

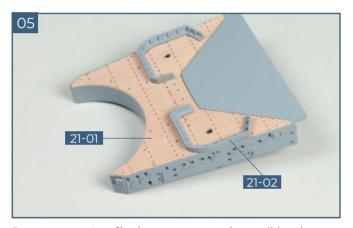




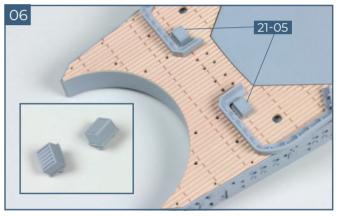
Turn the deck pieces over, keeping the decking in place, and fix together from the underside using four **PB** 2 x 5mm screws.



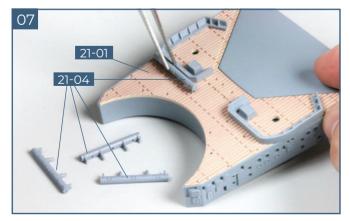
Check the fit of the starboard protective wall **20-03** on the deck **20-01**. When you are happy with the fit, apply a tiny bit of superglue to the studs on the lower edge of the wall **20-03** and fix in place.



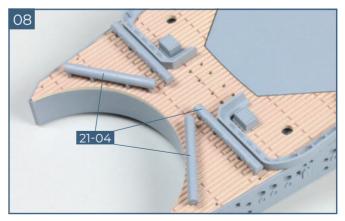
Repeat step 4 to fix the port protective wall in place on the other side of the deck.



Remove the two skylights **21-05** from the frame. File away any unevenness where they were connected to the frame (inset). Check the fit of the skylights on the deck, inside the protective walls. Glue in place as shown.



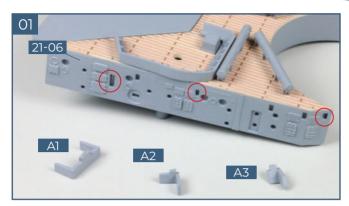
Cut the four barrel containers **21-04** from their frame. Check the fit of the containers – the pegs on the containers fit into the holes in the decking **20-01**.



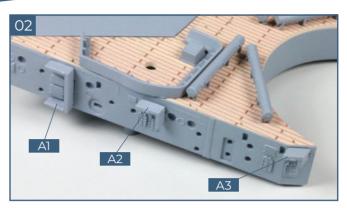
Apply a little superglue to the pegs on the containers and glue them in place on the deck, as shown.



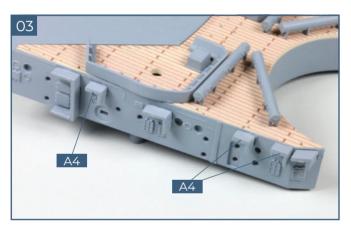
02. DETAILS FOR THE WALL OF THE SUPERSTRUCTURE DECK



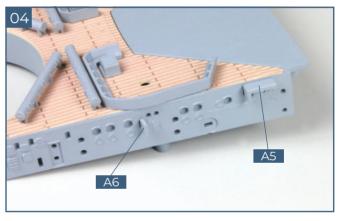
Remove the three parts A1, A2 and A3 from the frame 21-07, taking care not to remove the side tabs. Identify the fixing points on the starboard wall of the superstructure deck 21-06 (circled).



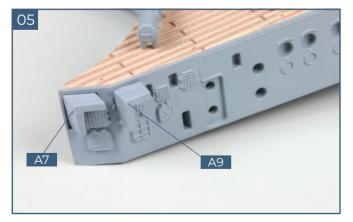
Apply a little superglue to the pegs on parts **A1**, **A2** and **A3** and fix in place on the starboard superstructure deck wall, as shown.



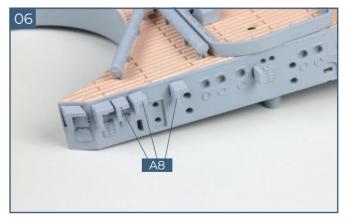
Next, cut the three rain guards (with their side tabs) **A4** from the frame **21-07** and glue them to the starboard side of the superstructure deck, as shown.



Turn the superstructure deck around to access the port side. Cut parts **A5** and **A6** from the frame with their side tabs and glue them in place as shown.

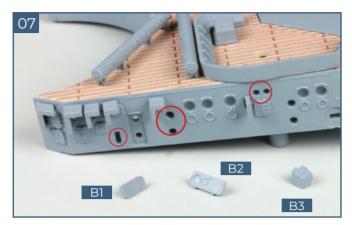


At the forward end of the port side, cut the rain hoods A7 and A9 from the frame with their side tabs and stick them in place as shown.

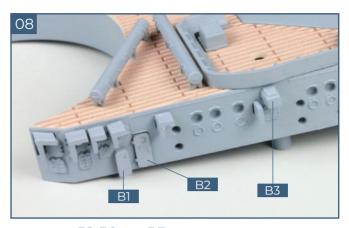


Cut the three smaller rain hoods **A8** from the frame with their side tabs and stick them in place next to parts **A7** and **A9** as shown.

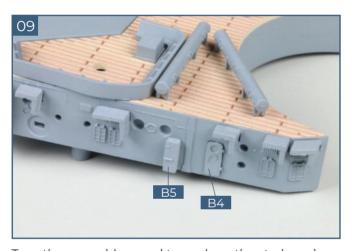




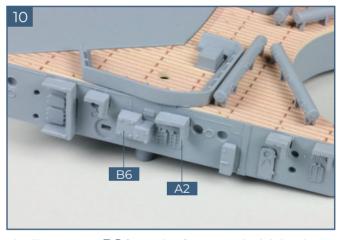
Study the shapes of the parts on frame 21-08 to identify the parts: storage lockers **B1** and **B3** and the door **B2**. Cut them from the frame and check how they fit into the circled sockets on the forward end of the superstructure deck.



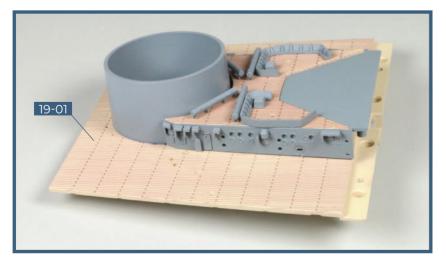
Stick parts **B1**, **B2** and **B3** in place as shown, using a little superglue. Note that the door should have the porthole at the top.



Turn the assembly round to work on the starboard side. Cut parts **B5** and **B4** from the frame and stick them in place towards the forward end of the superstructure deck wall.



Finally, cut part **B6** from the frame and stick in place near the rain guard **A2** as shown.



Completed work

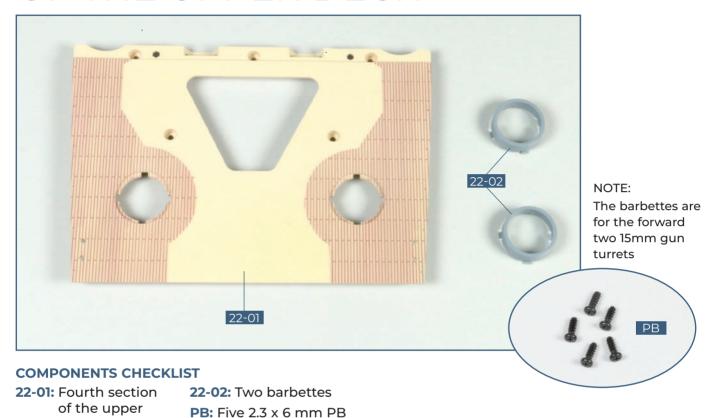
The forward section of the superstructure deck has been assembled with details added to the walls. You can get a better idea of the progress so far by placing the superstructure deck on the deck (19-01) and barbette assembled in stage 19.



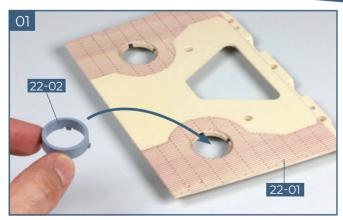
STAGE 22

deck

THE FOURTH SECTION OF THE UPPER DECK

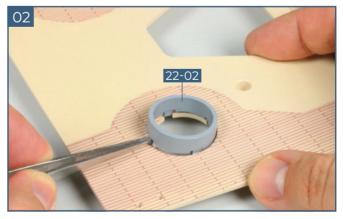


01. FITTING THE BARBETTES



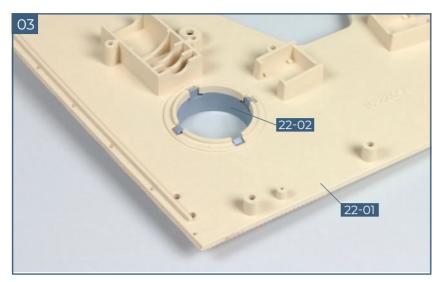
screws

Place the upper deck section **22-01** on your worktop. Take one of the two barbettes **22-02** and fit it in one of the openings in the upper deck, as indicated.

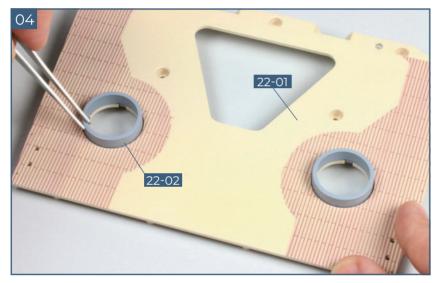


Ensure that the square pegs at the base of barbette **22-02** fit into the recesses around the opening. You may need to push the last pin in from the outside so that the barette clicks into place.



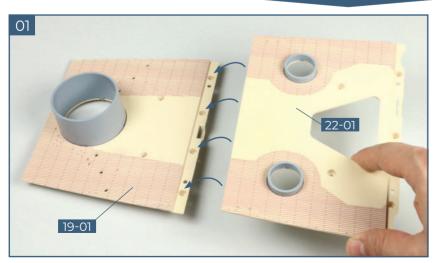


Viewed from below, you can see that all four of the square pegs on the base of the barbette **22-02** are fitted in place.



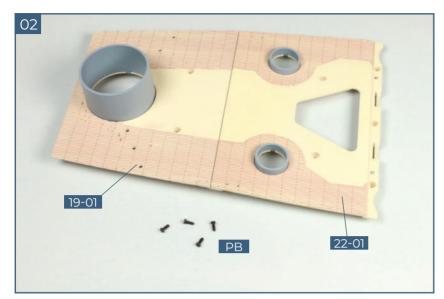
Repeat steps 1 to 3 to fit the second barbette **22-02** into the right-hand circular opening in the upper deck **22-01**.

02. FITTING THE DECK SECTIONS TOGETHER

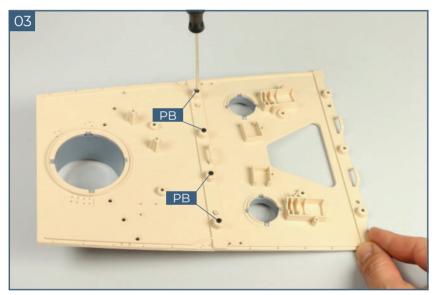


Place the upper deck section 19-01 (assembled in stage 19) on your worktop. Take the fourth upper deck section 22-01 and fit the forward edge of 22-01 over the edge of part 19-01 so that the four pegs on the base of 22-01 are located in the sockets in part 19-01, as indicated.

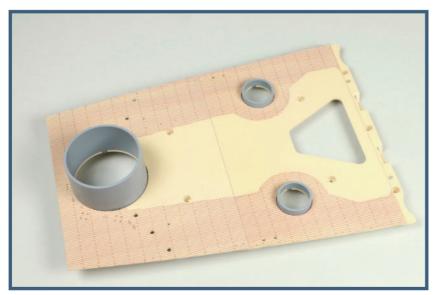




The deck sections should fit together with the markings on the deck aligned. In order to fix the two deck sections together, you will need four **PB** screws.



Turn the deck pieces over, ensuring the pegs are still located in the sockets. Fix the two deck sections together using the four **PB** screws.



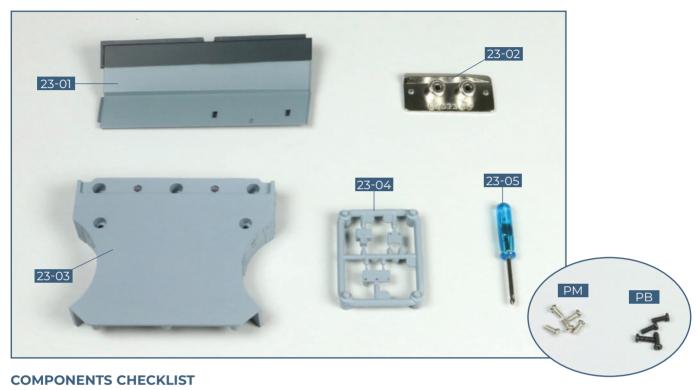
Completed work

The third and fourth sections of the upper deck have been joined together. The first two 15mm gun barbettes have been fitted in place.



STAGE 23

HULL SECTION AND SUPERSTRUCTURE DECK



23-01: Upper port hull section

23-02: Connector

23-03: Superstructure deck section

23-04: Superstructure deck details

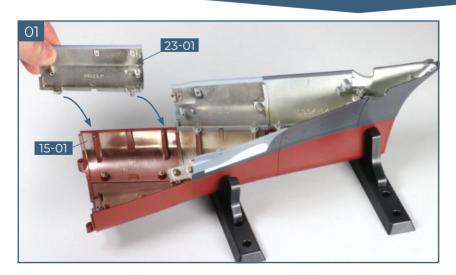
23-05: Screwdriver

PM: Five 2 x 4 mm silver PM screws

PB: Four 2 x 5 mm black PM

screws

01. CONTINUING THE HULL ASSEMBLY



Take the hull assembly from stage 20. Fit the upper port hull section **23-01** along the upper edge of the lower port hull section **15-01**, as indicated by the arrows.





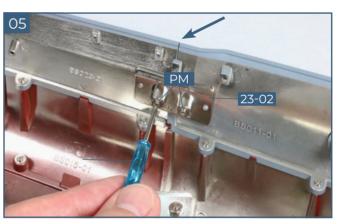
To fix the hull section in place you will need two **PM** 2 x 4 mm silver screws.



Fix hull section **23-01** in place with the screws. Don't worry if there is a gap between **23-01** and the forward section of the hull (indicated by the arrow). Identify the raised screw sockets (circled) where connector **23-02** will fit (see next step).

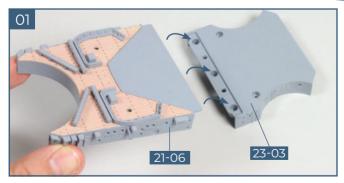


Fit the connector **23-02** on the raised screw sockets of the hull sections **23-01** and **11-01**.

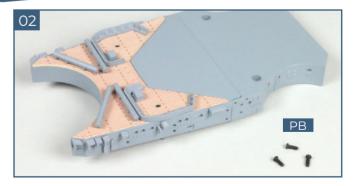


Fix the connector **23-02** in place with two silver **PM** 2 x 4 mm screws. As you tighten the screws the gap between the hull section will disappear (see arrow).

02. FITTING THE SUPERSTRUCTURE DECK SECTIONS TOGETHER



Place the superstructure deck **23-03** on your worktop alongside the superstructure deck **21-06** assembled in stage 21. Fit the lip on part **21-06** over the edge of part **23-03** as indicated by the arrows.



You will need three **PB** 2 x 5 mm black screws to fix the deck sections together.





Carefully turn the deck pieces over, making sure you do not damage any of the parts already fitted. Ensure the overlap remains in place.



Fix the two deck pieces together from below using three **PB** 2 x 5 mm black screws.

03. DETAILS FOR THE WALLS OF THE SUPERSTRUCTURE DECK



Turn the assembled superstructure deck right side up. Remove platform C1 and box C2 from frame 23-04. Make sure you do not cut the locating pins off part C1. Use a little superglue to fix the parts on the port side of the superstructure deck section 23-03 as shown.



Remove part **C3** from the frame **23-04** and use a little superglue to fix it to the starboard side of the superstructure deck section **23-03** as shown.

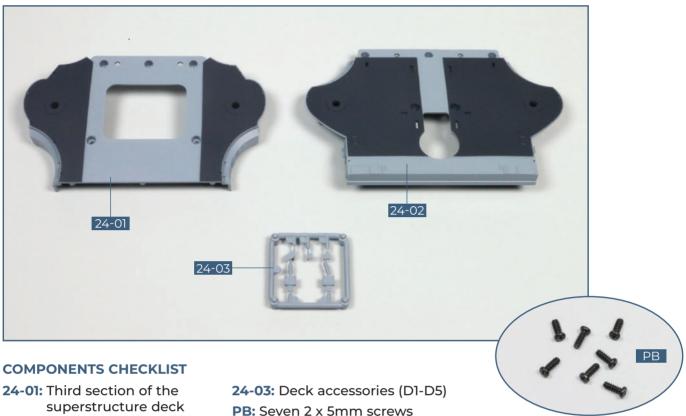


Completed work

Another section has been added to the hull and the superstructure deck has grown.



STAGE 24 THE SUPERSTRUCTURE DECK GROWS



superstructure deck

24-02: Fourth section of the superstructure deck

01. JOINING THE TWO DECK SECTIONS TOGETHER



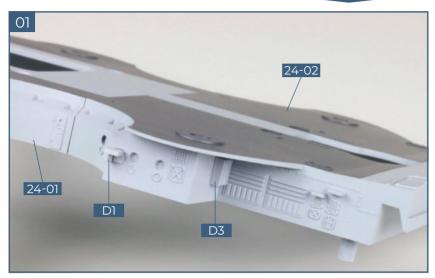
Align the two sections of the deck: pegs at the back edge of 24-01 fit into holes in the forward edge of 24-02 where the two pieces overlap.



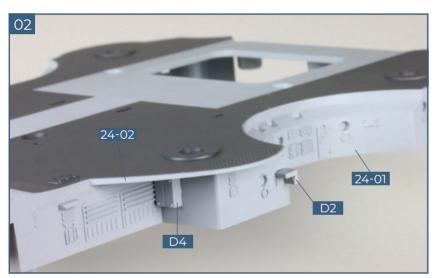
Turn the deck over and identify the three sockets along the overlap. Fix the parts together with three PB screws.



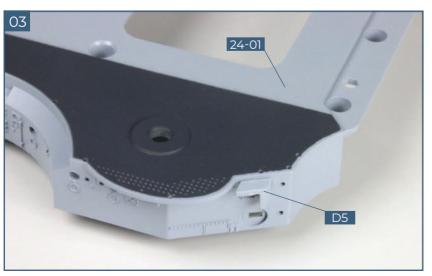
02. ACCESSORIES FOR THE SIDE OF THE SUPERSTRUCTURE DECK



Cut two rain hoods (**D1** and **D2**) and two storage cupboards (**D3** and **D4**) from the plastic frame **24-03**. Smooth off any rough edges where the parts have been cut from the frame and test the fit. Fix parts **D1** and **D3** to the port side of the assembled decks **24-01** / **24-02**, as shown, using a little superglue.



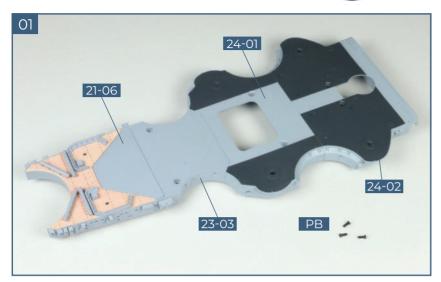
Turn the deck around and fix parts **D2** and **D4** to the starboard side of the assembled decks **24-01** / **24-02**, as shown, using a little superglue.



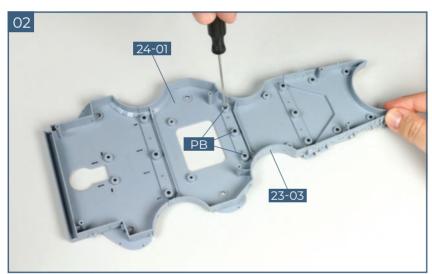
The final part on the frame **24-3** is another rain hood, **D5**. Cut it from the frame, smooth off any rough edges after cutting and test the fit. Fix it to the starboard side of deck part **24-01** as shown, using a little superglue.



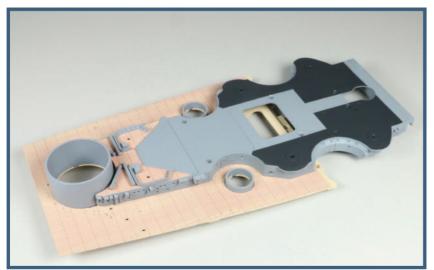
03. JOINING THE DECK PARTS



Take the deck structure completed in the previous stage (21-06 / 23-03) and align it with the deck section assembled in this stage. You will also need three PB screws.



Carefully turn the decks over, without damaging the parts already fitted. Identify the three screw holes in the overlapping strip. Fix the parts together with three **PB** screws.

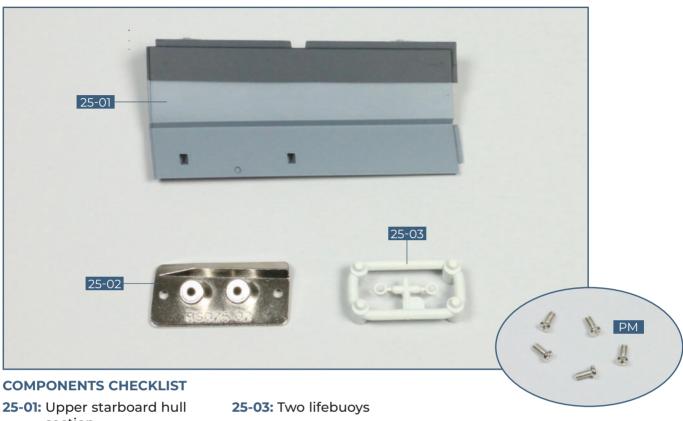


Completed work

The size of the superstructure deck has grown considerably. To see the effect, we have positioned the work completed in this stage on the section of the main deck completed earlier.



STAGE 25 A HULL SECTION AND LIFEBUOYS

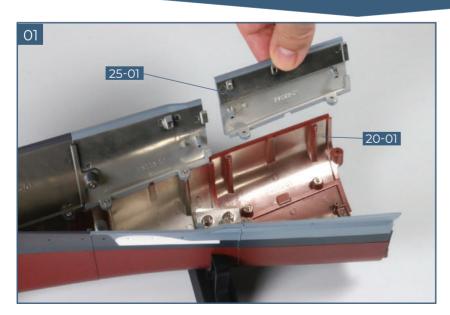


section

25-02: Hull connector

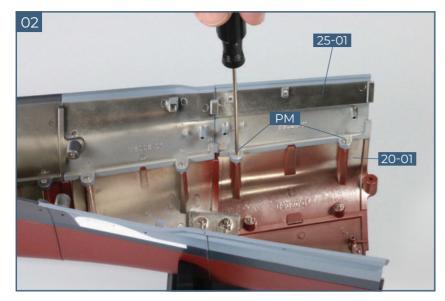
PM: Five 2 x 4 mm screws

01. FITTING THE HULL SECTION

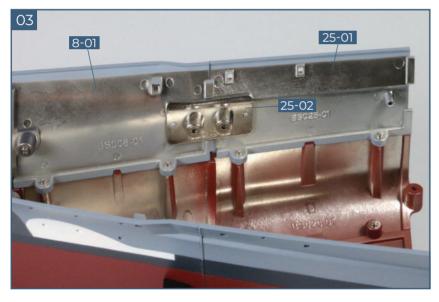


Take the hull structure assembled so far and place it on your worktop. Fit the upper starboard hull section 25-01 in place above the lower starboard section **20-01** as shown.





Fix the lower edge of hull section **25-01** to hull section **20-01** using two **PM** screws.



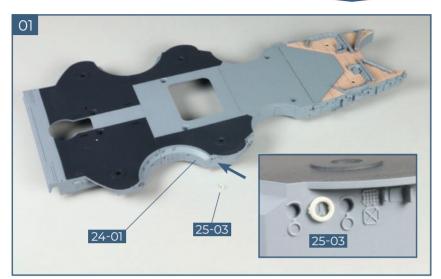
Fit the hull connector **25-02** in place so that the screw sockets fit over the raised screw sockets on the hull sections.



Fix the hull connector **25-02** in place with two **PM** screws.



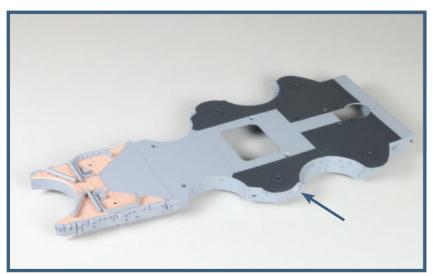
02. FITTING THE LIFEBOUYS



Carefully cut the two lifebuoys from the plastic frame **25-03**. Place the deck construction from the previous stage on your work top with the starboard side facing you. Identify the fixing point for the first lifebuoy, indicated by the arrow. Fit the pegs on the lifebuoy into the holes in the wall of the deck (inset).



Turn the deck around and fit the second lifebuoy to the port side wall, directly opposite the first lifebuoy.



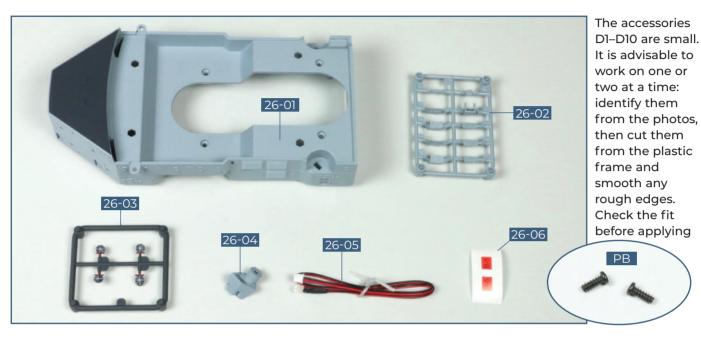
Completed work

As well as extending the hull, further details have been added to the superstructure deck, as shown here.



STAGE 26

FORWARD PART OF THE SUPERSTRUCTURE



COMPONENTS CHECKLIST

26-01: Bridge deck

26-02: Bridge accessories (D1–D10)

26-03: Deck accessories (E1–E4)

26-04: LED holder

26-05: Cable with green light

26-06: Cable label

PB: Two 2 x 5 mm screws

01. BRIDGE DECK ACCESSORIES D1 - D10



Place the bridge deck **26-01** on your worktop. Cut two rain hoods (**D1** and **D6**) from the plastic frame **26-02** and fit them to the forward end of the port side, as shown. Check the fit before gluing in place.

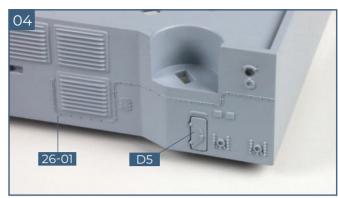


The next two parts fit on the angled side of the forward end of the bridge deck **26-01**. Fit the storage locker **D7** into the front recess, noting the alignment of the locker. Fit the door **D9** into the second recess, so that the hinges on the door fit into the recesses on the left-hand side.





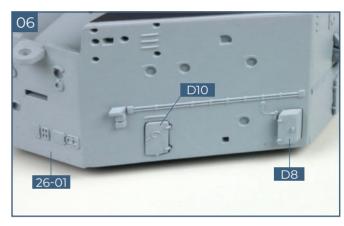
Moving around to the front of the bridge deck, fit the door **D4** and the storage unit **D2**. Again, note the position of the hinges on the door. Check the fit and make any necessary adjustments before gluing in



At the rear of the bridge deck **26-01**, on the port side, fit door **D5**, ensuring the hinges are positioned as shown.

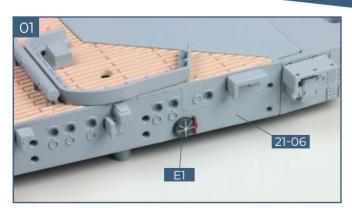


A similar door, **D3**, is fitted to the starboard side of bridge deck **26-01**, near the rear of the deck. Note how the hinges are on the right.



On the angled wall on the starboard side of bridge deck **26-01**, fit door **D10** and storage locker **D8**. These are mirror images of the parts fitted in step 2.

02. FITTING THE FIRE HOSES E1 - E4



Take the superstructure deck assembly from the previous stage. The first fire hose **E1** is fitted to the forward port side, on part **21-06**. Check the fit and glue in place as shown.

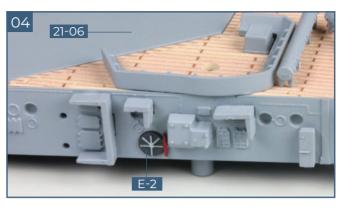


Fire hose **E3** is fitted to the forward port side of deck section **24-01**. Check the fit and glue in place as shown.



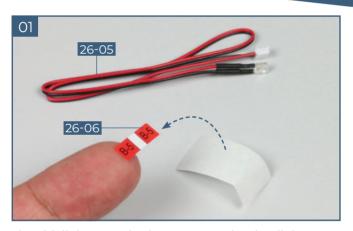


Turn the deck around so that you can fit fire hose **E4** to the front of the starboard side of deck section **24-01**. Check the fit and glue in place as shown.

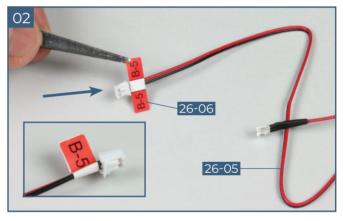


Put the superstructure deck section aside. The fourth fire hose is fitted to the starboard side of deck section **21-06**. Check the fit and glue in place as shown.

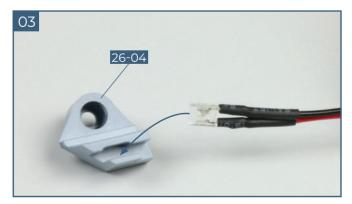
03. THE FIRST SIDELIGHT



The sidelights are also known as navigation lights (green for starboard and red for port). Take the cable **26-05**. Carefully remove the cable label **26-06** from the backing.



Wrap the cable label around the socket end of cable **26-05** (away from the LED). Stick the ends together (see inset).

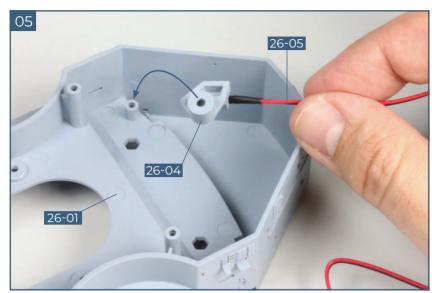


Fit the LED into the LED holder 26-04 as shown.

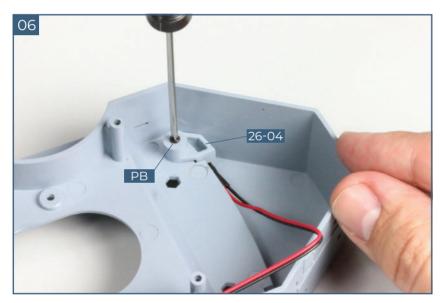


This shows the LED properly seated in the holder **26-04**.

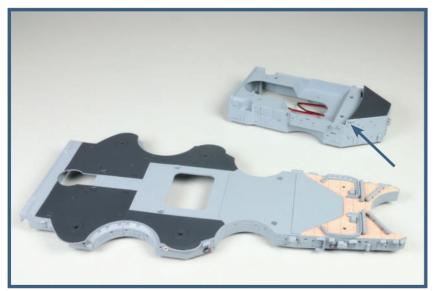




Turn the bridge deck (26-01) upside down, taking care not to dislodge any of the parts that have been fitted. Fit the LED holder 26-04 onto the raised socket on the port side, as indicated by the arrow.



Fix the LED holder in place with a **PB** 2 x 5 mm screw.

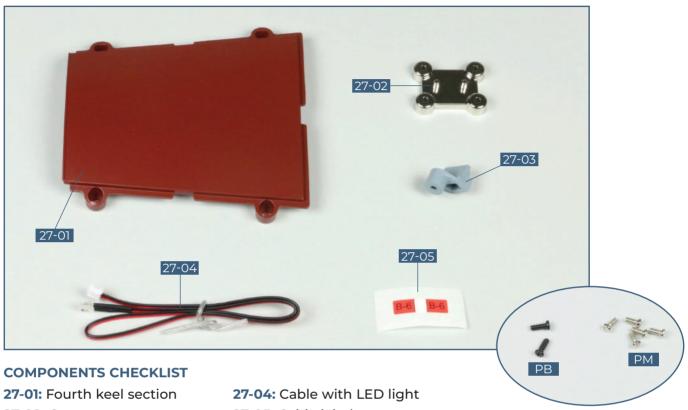


Completed work

Details have been fitted around the bridge deck, and fire hoses have been fitted to the forward superstructure deck. We have started to fit the starboard navigation light – the arrow indicates where it will eventually appear.



STAGE 27 HULL SECTION AND NAVIGATION LIGHT



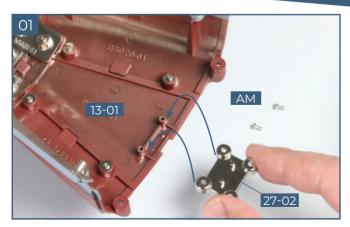
27-02: Connector

27-03: LED holder

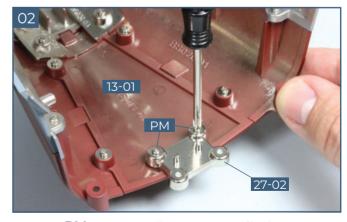
27-05: Cable label

PB Two 2 x 5 mm black screws PM Five 2 x 4 mm silver screws

01. FITTING THE HULL SECTION

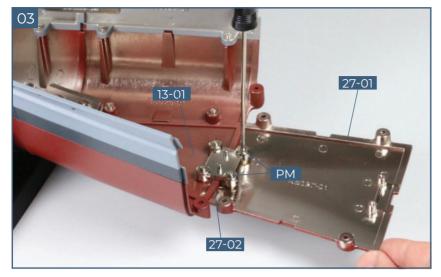


Take the hull assembly from stage 25. Fit two of the screw sockets in the connector **27-02** over two pins on part **13-01**, in the base of the hull. The arrows indicate how it should be fitted.



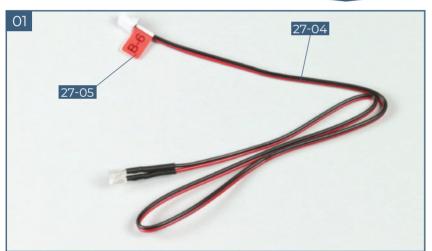
Use two **PM** 2 x 4 mm silver screws to fix the connector to the hull assembly.



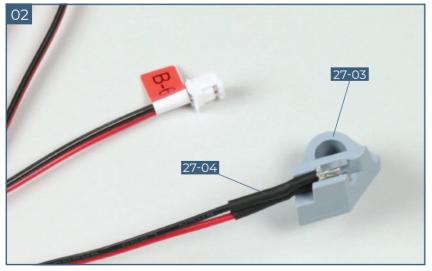


Position the hull section **27-01** so that it is aligned with part **13-01** and the pins on part **27-01** fit into the two free sockets on the connector **27-02**. Fix in place with two **PM** 2 x 4 mm silver screws.

02. FITTING THE SECOND SIDELIGHT (NAVIGATION LIGHT)

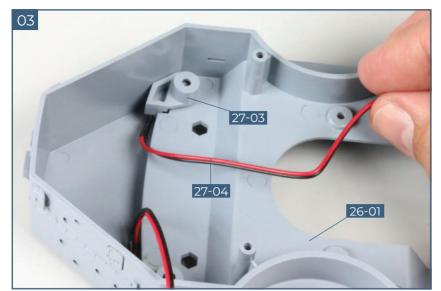


Take the cable **27-04** and the label **27-05**. Carefully lift the label off the backing and wrap it around the socket end of the cable.



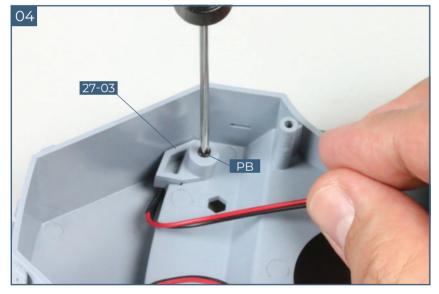
Fit the LED on the other end of the cable into the LED holder **27-03**.



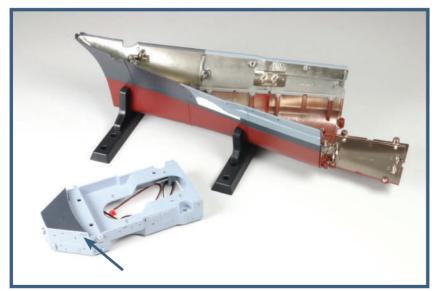


Take the bridge deck assembly from stage 26 and carefully turn it upside down. Fit the LED holder **27-03** into the shaped recess near the front of part **26-01**.

NOTE: The holder is a mirror image of the LED holder **26-04**, fitted in the previous stage.



Fix the LED holder **27-03** in place with one **PB** 2 x 5 mm screw.



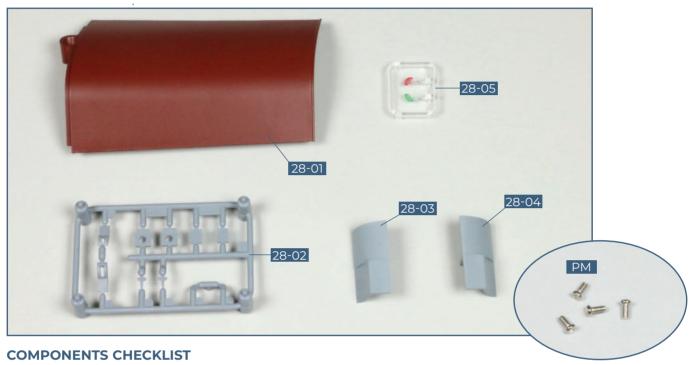
Completed work

Another keel section has been fitted to the hull. The second navigation light has been fitted to the bridge deck. The arrow indicates where the light will appear later.



STAGE 28

HULL AND ACCESSORIES FOR THE BRIDGE DECK

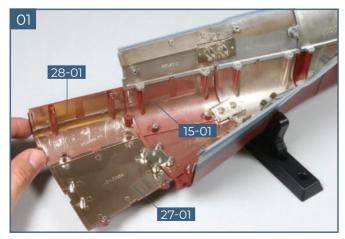


28-01: Port lower hull section 28-02: Bridge deck accessoires (H1-H8)

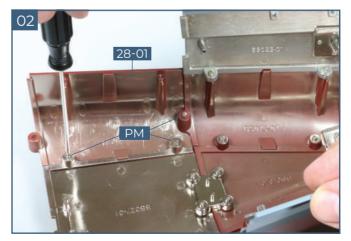
28-03: Port air intake cover (L)
28-04: Starboard air intake cover (R)

28-05: Two LED covers (red and green)PM: Four 2 x 4 mm PM screws (1 spare)

01. EXTENDING THE HULL



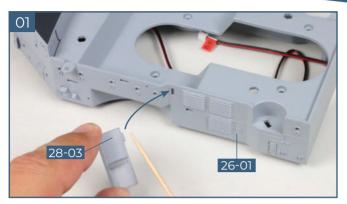
Fit the pegs on the port lower hull section **28-01** into the sockets in the hull section **15-01** and **27-01**.



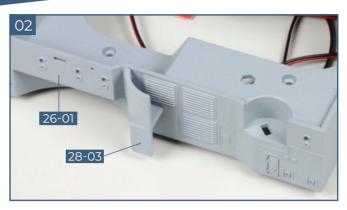
Fix the hull section 28-01 in place with three PM 2 x 4 mm screws.



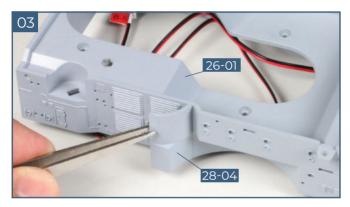
02. ACCESSORIES FOR THE FORWARD BRIDGE DECK



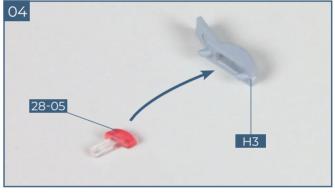
Place the bridge deck assembly **26-01** on your work surface with the port side facing you. Check the fit of the port air intake cover **28-03**. Apply a little superglue to the pegs on the edge of part **28-03**.



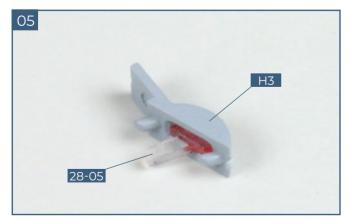
Stick the air intake cover 28-03 in place as shown.



Turn the bridge deck around and check the fit of the starboard air intake cover **28-04**. Apply a little superglue to the pegs on the edge of part **28-04** and stick in place as shown.



Identify part **H3**, the port navigation light housing, and cut it from the plastic frame. Cut the red LED cover from the frame and fit it into part **H3**, as indicated by the arrow.



The red part of the LED cover fits into the recess in part **H3**.

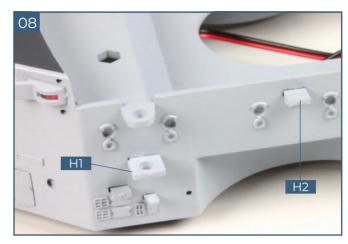


Identify the fixing point for the port navigation light housing on the bridge deck and check the fit. Apply a little superglue on the pegs of part **H3** and fix in place.

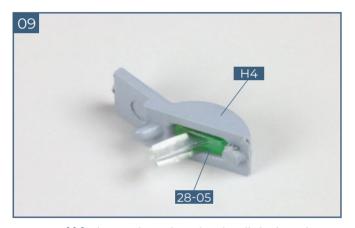




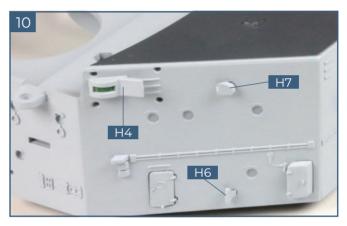
Identify parts **H8** and **H5**, cut them from the frame and smooth any rough edges. Check the fit on the port side of the bridge deck and stick in place as shown.



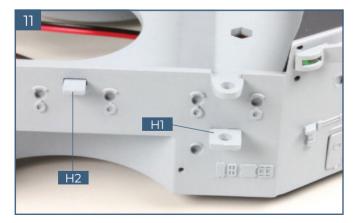
Identify parts **H1** and **H2** and cut them from the frame. Check the fit further aft on the port side of the bridge deck and stick in place as shown.



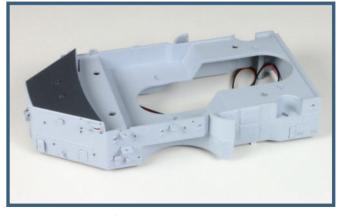
Cut part **H4**, the starboard navigation light housing, from the frame. Fit the green LED cover **28-05** into the recess in part **H4**.



Identify the fixing point for part **H4** on the starboard side and check the fit. Apply a little superglue to the pegs on part **H4** and fix in place as shown. Cut parts **H7** and **H6** from the frame and use a little superglue to fix in place on the starboard side of the forward part of the bridge deck as shown.



Cut parts **H1** and **H2** from the frame and identify the fixing points on the starboard side of the bridge deck. Apply a little superglue to the pegs and fix in place as shown.

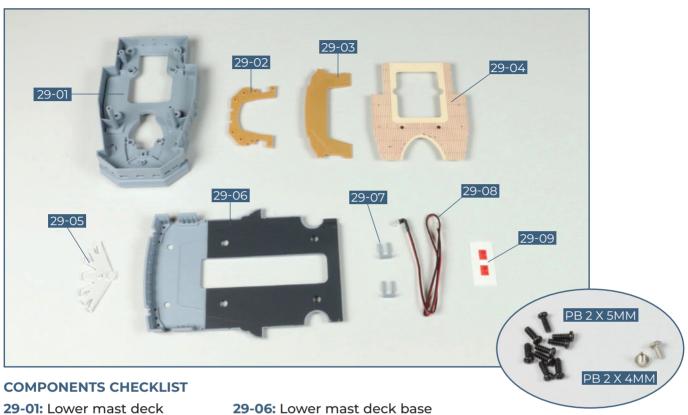


Completed work

We have fitted a range of accessories, including the port and starboard navigation lights, to the bridge deck.



STAGE 29 BRIDGE DECK AND LOWER MAST DECK



29-02: Decking

29-03: Decking

29-04: Decking

29-05: Bridge window panel

29-07: Guardhouse (x2)

29-08: LED cable

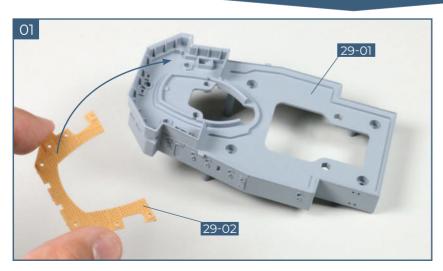
29-09: Cable label

PB: Nine 2 x 5 mm PB screws

PB: Two 2 x 4 mm PB silver

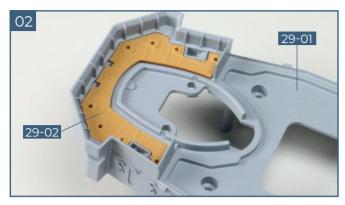
screws

01. ADDING DECKING TO THE LOWER MAST DECK

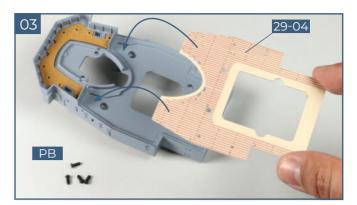


Take the lower mast deck 29-01 and the section of decking 29-02. Check how the decking fits on the forward part of the lower mast deck, as indicated by the arrow.

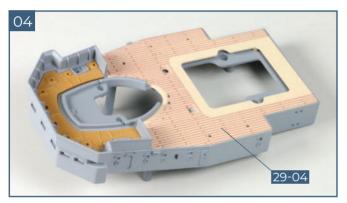




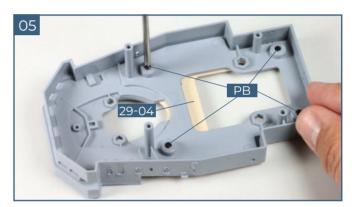
The decking **29-02** should lie completely flat over the area, as shown.



Take the large section of decking **29-04** and check the fit on the main part of the lower mast deck **29-01**. You will need four 2 x 5 mm **PB** screws.

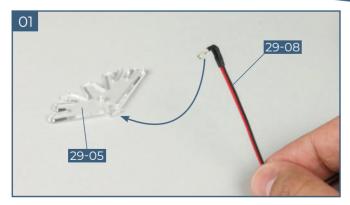


The decking **29-04** should lie flat on the lower mast deck.



Turn over the lower mast deck **29-01** and identify the four raised screw sockets. Fix the decking in place with four 2 x 5 mm **PB** screws.

02. FITTING THE BRIDGE LIGHTING

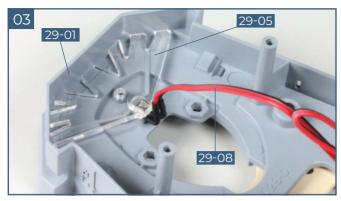


Place the command bridge windows **29-05** on your work surface, together with the LED cable **29-08**.

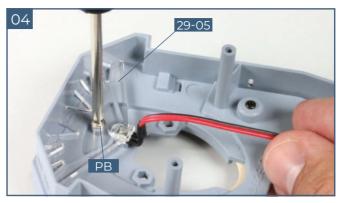


Fit the LED on the end of the **29-08** into the recess in the windows **29-05**.

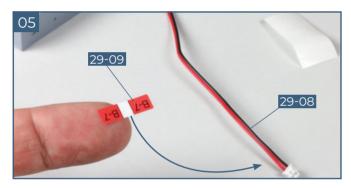




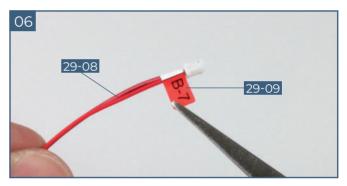
Turn the bridge window panel **29-05** over, and fit the window panel into the underside of the lower mast deck **29-01**, so that the tabs on the window panel fit into the slots, forming the windows. The window panel should hold the LED in place.



Fix the bridge window panel **29-05** in place with a 2 x 4 mm silver **PB** screw.

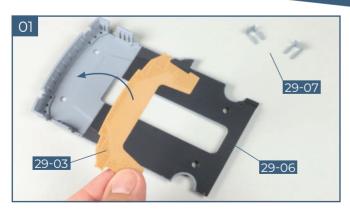


Peel the cable label **29-09** from its backing so that you can wrap it around the other end of the LED cable **29-08**.

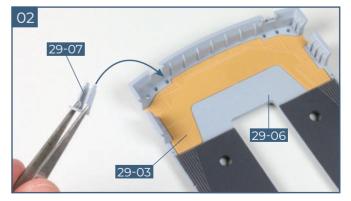


Wrap the cable label around the free end of the cable **29-08**, sticking the flaps together firmly.

03. FITTING THE LOWER MAST DECK

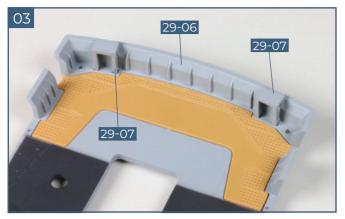


Take the lower mast deck base **29-06** and the third section of decking **29-03**. Fit the decking into the forward end of the lower mast deck base **29-06**. You will also need the two guardhouses **29-07**.

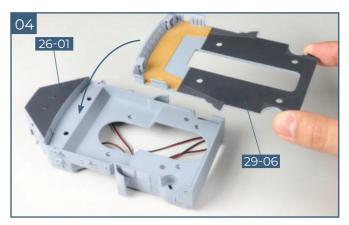


With the decking in place, identify the fixing points for the two guardhouses and check the fit. Apply a little superglue to the back of the first guardhouse and fix in place.

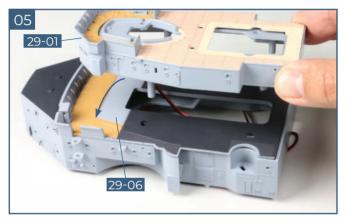




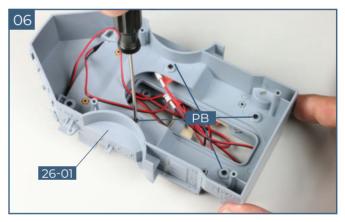
With the first guardhouse **29-07** glued in place, repeat to glue the second guardhouse in place.



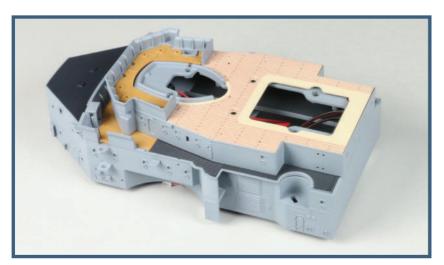
Place the bridge deck structure **26-01** on the work surface. Position the base of the lower mast deck **29-06** on the bridge deck as indicated by the arrow.



Position the lower mast deck structure **29-01** on top of the lower mast deck base **29-06** as shown.



Holding the three layers together, carefully turn the assembly over. Fix the three pieces together with four $2 \times 5 \text{ mm}$ **PB** screws.

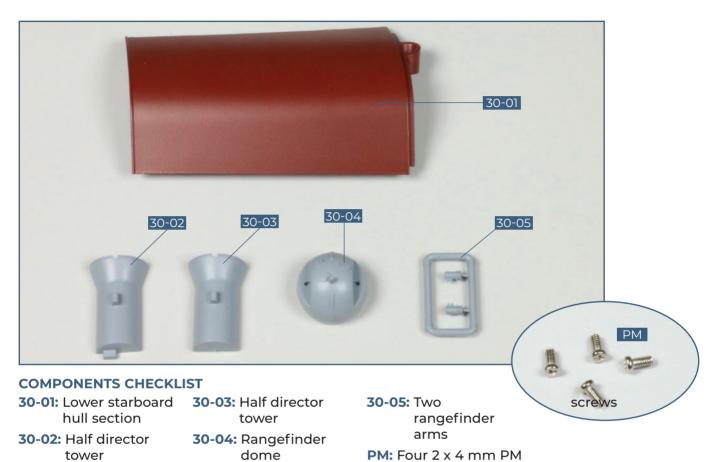


Completed work

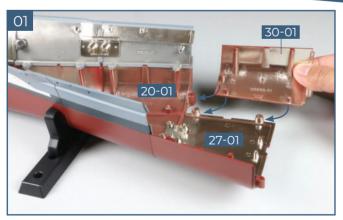
The forward section of the superstructure is gradually taking shape. The lower mast deck has been fixed to the bridge deck and lighting has been fitted inside the command bridge.



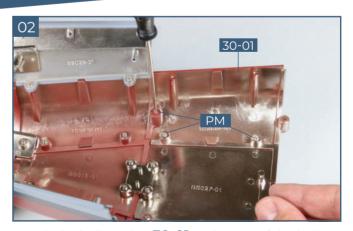
STAGE 30 HULL SECTION AND RANGEFINDER



01. FITTING THE NEXT HULL SECTION



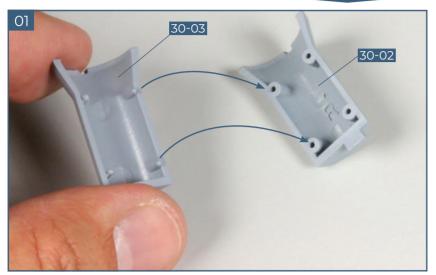
Place the hull assembly on your work surface. Fit the pegs on the lower right hull section **30-01** into the sockets in the hull section **20-01** and **27-01** as shown.



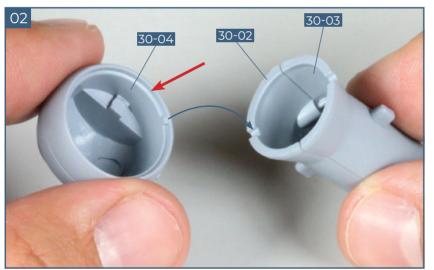
Attach the hull section 30-01 to the rest of the hull using three PM 2 x 4 mm screws.



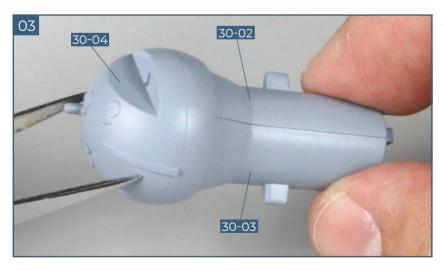
02. ASSEMBLING THE FORWARD STARBOARD RANGEFINDER (WACKELTOPF)



Take the two halves of the first tower, 30-02 and 30-03 and check that the pegs on part 30-03 fit into the holes on part 30-02. Apply a little superglue to the pegs and fix the parts together. (Wackeltopf was the German nickname for the domed rangefinders: the word translates literally as wobbly pot.)

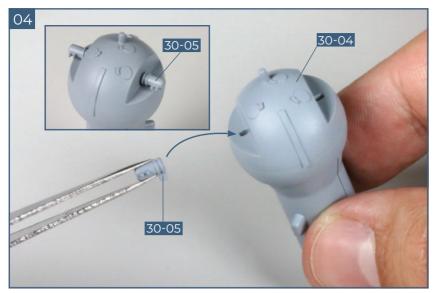


With the two halves of the tower, **30-02** and **30-03**, joined together, check the fit of the dome **30-04** on top of the tower. Study this photograph and step 3 carefully to ensure you have the correct alignment, so that the raised areas around the rim of the dome will fit into the notches in the tower. Apply a little superglue inside the rim of the dome, indicated by the red arrow.

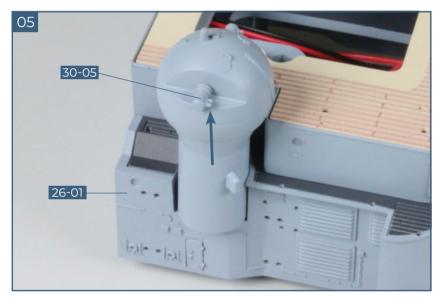


This shows the dome **30-04** being mounted on the tower.





Cut the two rangefinder arms **30-05** from the frame and check the fit in the holes on either side of the rangefinder dome **30-04**; note that one fits on the left and the other on the right. The peg on the base of the rangefinder arm fits into the hole on part **30-04** (see blue arrow). Check that you have the rangefinder arms correctly aligned, so that they will point forwards (see inset and next step).



Check how the assembled rangefinder fits near the back of the deck structure. A peg on the base of the rangefinder tower fits into a hole in the bridge deck **26-01**. Note that the rangefinder arms (**30-05**, see arrow) are pointing forwards. When you have found the correct position, glue it in place



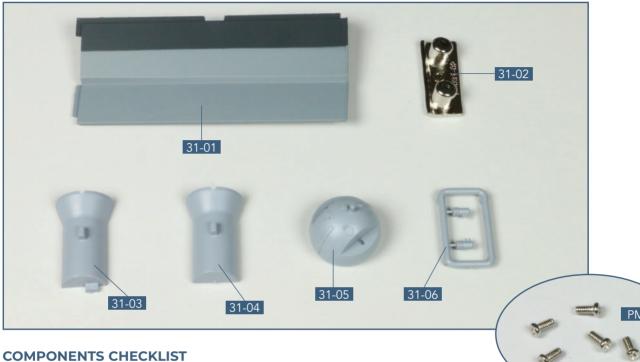
Completed work

A further section has been added to the hull (not shown) and the first rangefinder tower has been fitted to the superstructure.



STAGE 31

HULL SECTION AND SECOND RANGEFINDER



31-01: Upper port hull section

31-02: Connector

31-03: Half director tower

31-04: Half director tower

31-05: Rangefinder dome

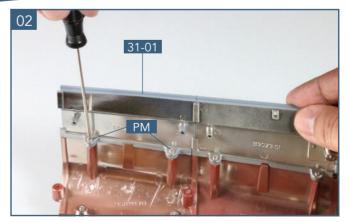
31-06: Two rangefinder arms

PM: Five 2 x 4mm PM screws

01. FITTING THE UPPER PORT HULL SECTION

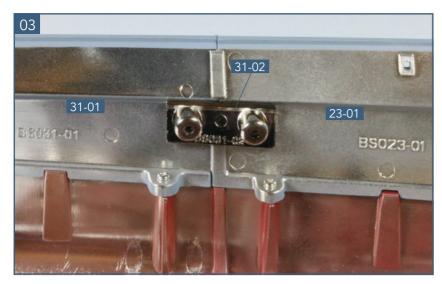


Place the hull assembly on your worksurface. Position the upper port hull section 31-01 on the structure so that the two tabs fit over the screw sockets in part 28-01, as indicated by the arrows.



Fix the hull section 31-01 in place with two of the PM screws.



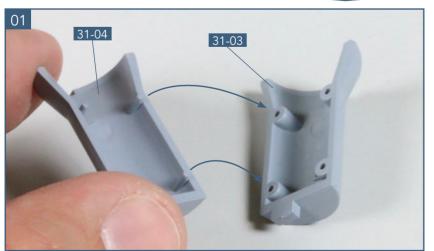


Position the connector **31-02** across the join between the upper hull sections **31-01** and **23-01** so that the sockets on part **31-02** fit over the raised screw sockets on parts **31-01** and **23-01**.



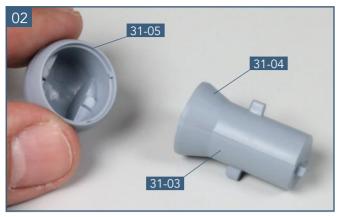
Fix the connector **31-02** in place with two **PM** screws.

02. ASSEMBLING AND FITTING THE FORWARD PORT RANGEFINDER

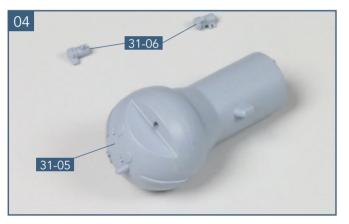


Check the fit of the two halves of the director tower **31-03** and **31-04**. Apply a little superglue to the pegs on part **31-04** and glue them into the sockets on part **31-03**.





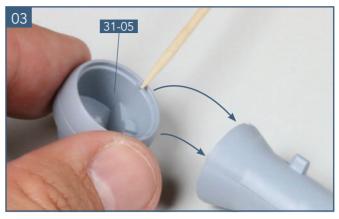
With the two halves of the tower fitted together, check the fit and orientation of the rangefinder dome **31-05**. Read the following steps to ensure you have the dome the right way round before you continue.



After fitting the dome **31-05** to the tower, you need to position the rangefinder arms **31-06**. Cut the rangefinder arms from the frame and check the fit and orientation.



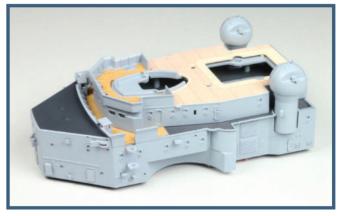
Check the fit of the rangefinder tower on the port side of the bridge deck **26-01**. Note that the rangefinder arms should point forwards. When you are happy with the position, glue in place.



Apply a little superglue around the inner rim of the dome **31-05** and fix in place on the top of the tower so that the raised areas on the inside of the dome fit into the recesses at the top of the tower.



Fit the rangefinder arms **31-06** into the recesses in the dome, ensuring that they are pointing the right way, as indicated by the arrows.

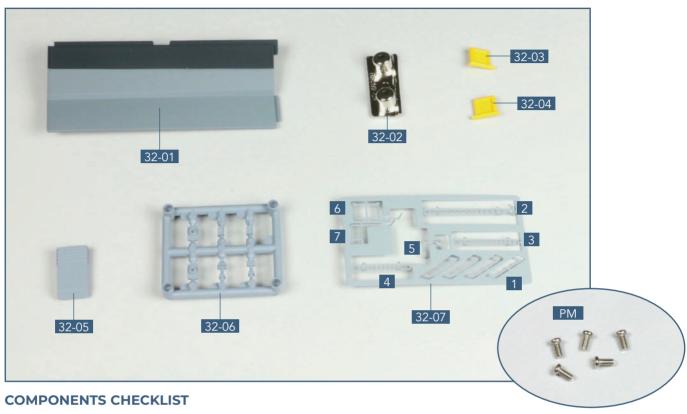


Completed work

Another section of the hull has been fixed in place, and the second of the cupola-covered rangefinders has been assembled and fitted to the superstructure.



STAGE 32 HULL SECTION AND ACCESSORIES



32-01: Upper starboard hull section

32-02: Connector piece

32-03: Port life raft (L)

32-04: Starboard life raft(L)

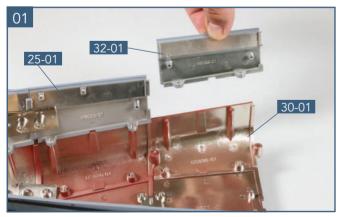
32-05: Fan

32-06: Accessories (I1–I4)

32-07: Metal details (1-7)

PM: Five 2 x 4 mm PM screws

01. FITTING THE NEXT HULL SECTION



Take the upper right hull section **32-01** and position it above the hull section **30-01** so that the screw holes are aligned, as shown. You may need to temporarily loosen part **25-01** when fitting in place.



Fix part 32-01 to part 30-01 with two PM screws.





Fit the connector piece **32-02** in place across the join between parts **25-01** and **32-01** so that the raised screw holes fit into the sockets in part **32-02**.

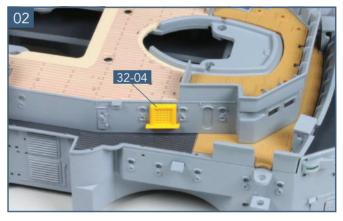


Fix part 32-02 in place with two PM screws.

02. DETAILS FOR THE WALLS AND DECKS OF THE FORWARDSUPERSTRUCTURE



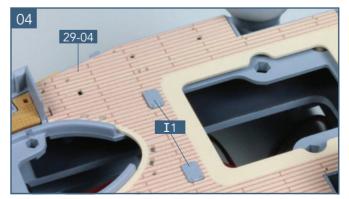
Take the front superstructure assembly along with life raft part **32-03** (marked L on the back). After test fitting, use a little superglue to fix in place on the port side of the bridge deck as shown in the photo.



Turn the superstructure around and use a little superglue to fix the starboard life raft **32-04** (marked R on the back) in place on the starboard side as shown.

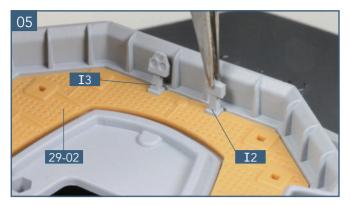


Test the fit of the the fan **32-05** at the centre of the aft end of the superstructure assembly. Apply a little superglue to the two pins on the back of the fan and fix in place.

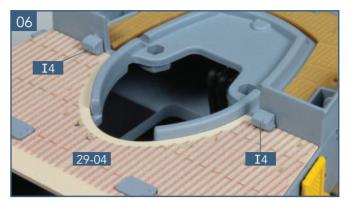


Take the frame **32-06** and carefully cut away the two hatches **I1**. Identify the two recesses on the decking **29-04** and fix the hatches in place with a little superglue.





Cut the control station **I2** and the engine communication console **I3** from the frame and identify the fixing points on the deck **29-02** at the front of the superstructure. Ensure they are fitted the right way round, as shown, and fix in place with a little superglue.



Cut the two ventilators **I4** from the frame and identify the fixing points on either side of the opening on deck **29-04**. Fix in place with a little superglue.

03. METAL DETAILS FOR THE FORWARD SUPERSTRUCTURE



Take the metal frame **32-07** and remove all the parts: you can grip them with tweezers and twist them or use a side cutter to clip them from the frame. Use a fine file to remove any rough edges.



The first two metal parts are fitted above and below the port navigation light. Note the angle of the fixing bars at each end – the sharper angle goes at the rear.

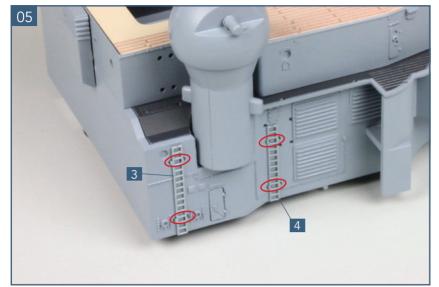


The next two metal parts are fitted above and below the starboard navigation light. Again, make sure you have the parts the right way round.



Take the longer ladder **2** and fit it to the front of the superstructure, fixing it in place with a little superglue.





Take the two ladders, **3** and **4**, and identify the fixing points on either side of the rangefinder on the starboard side. Note that ladder **3** is slightly longer. Apply a little superglue to the brackets on the sides of the ladders (circled) and fix them in place.



Taking care not to bend the part, check how the platform, **5**, fits next to ladder **4**. Fix in place with a little superglue.



Completed work

Another section has been added to the hull. Various plastic and metal accessories have been attached to the superstructure. The two metal parts 6 and 7 will be fitted in a future stage. Keep them in a safe place.