

BISMARCK

THE LEGENDARY BATTLESHIP



Pack 07 | 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 seventh model pack, you will assemble:

STAGE 69: MOTOR FOR THE THIRD 15CM GUN

STAGE 70: THE FOURTH 15CM GUN TURRET

STAGE 71: THE NEXT KEEL SECTION

**STAGE 72: MOTOR FOR THE FOURTH
15CM GUN**

**STAGE 73: GEAR ASSEMBLY FOR THE SECOND
38CM GUN**

**STAGE 74: ELEVATION MOTOR FOR THE
SECOND 38CM GUN TURRET**

STAGE 75: DETAILS FOR THE UPPER DECK

STAGE 76: ROPE REELS AND FUNNEL DETAILS

**STAGE 77: HULL SECTION AND FUNNEL
DETAILS**

STAGE 78: FINAL DETAILS FOR THE FUNNEL

STAGE 79: THE NEXT HULL SECTION

STAGE 80: THE TWO AIRCRAFT HANGARS

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.

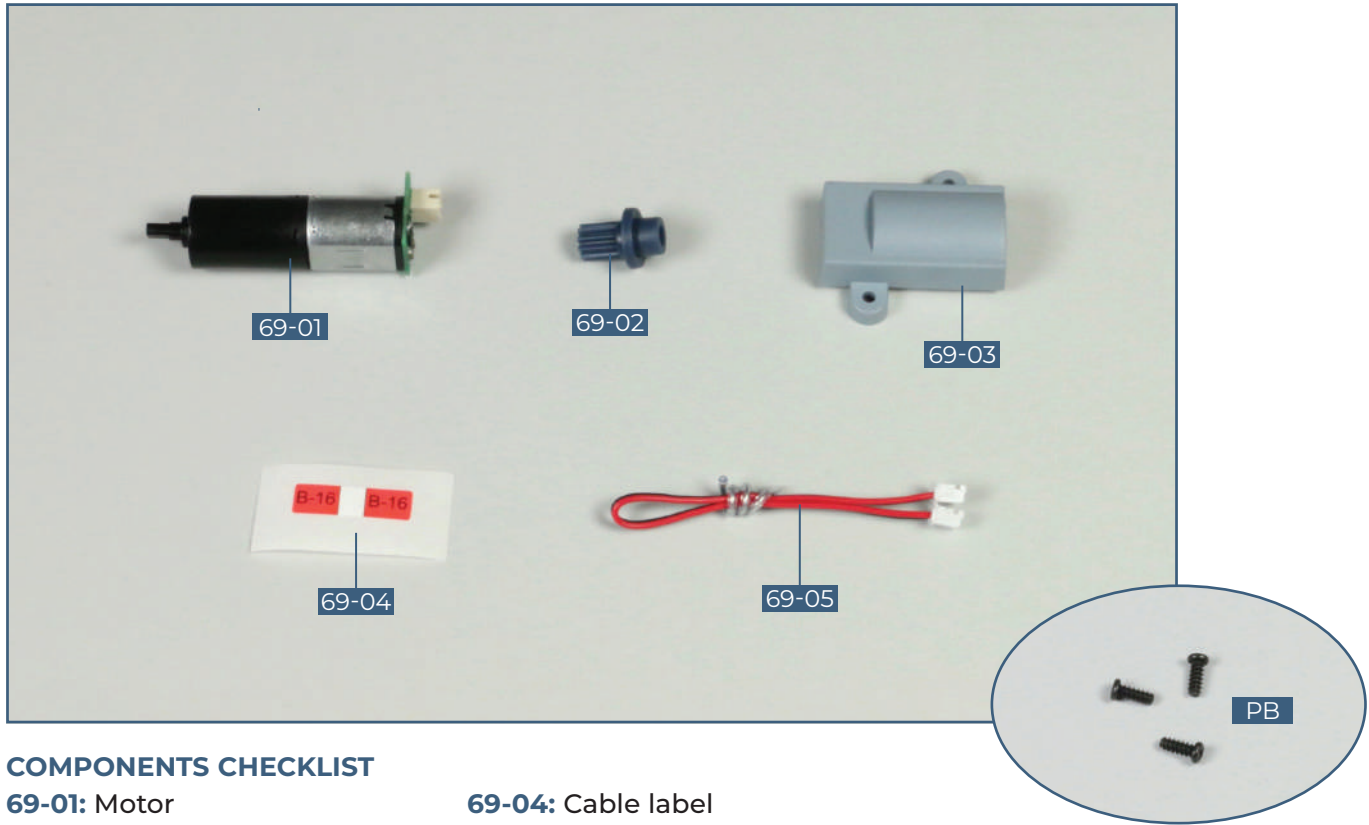
During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.



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 69

MOTOR FOR THE THIRD 15cm GUN



COMPONENTS CHECKLIST

69-01: Motor

69-02: Cog

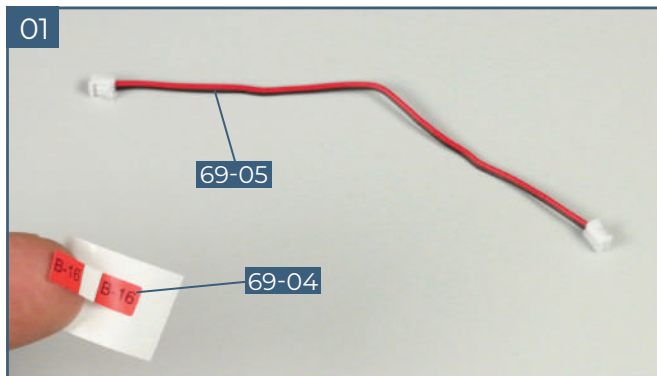
69-03: Motor housing

69-04: Cable label

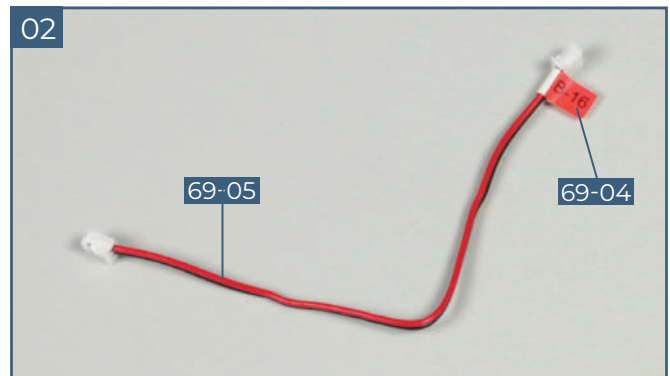
69-05: Cable for the gun motor

PB: Three 2 x 5mm PB screws

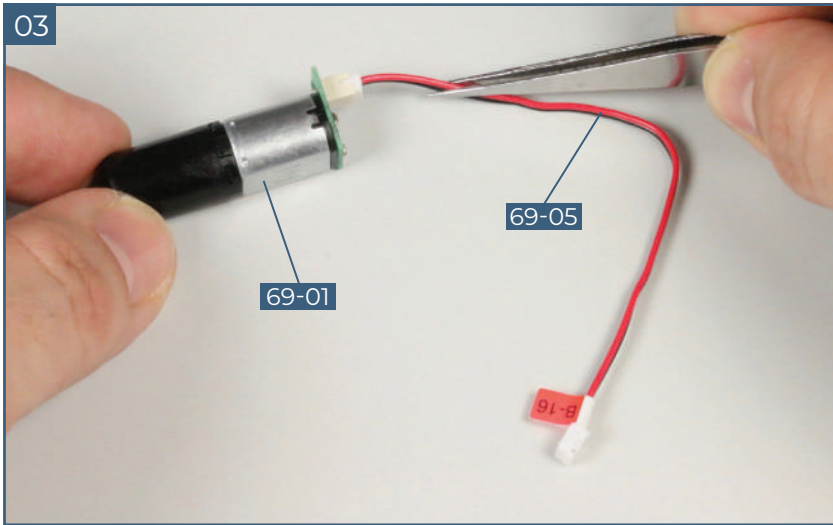
01. PREPARING THE MOTOR



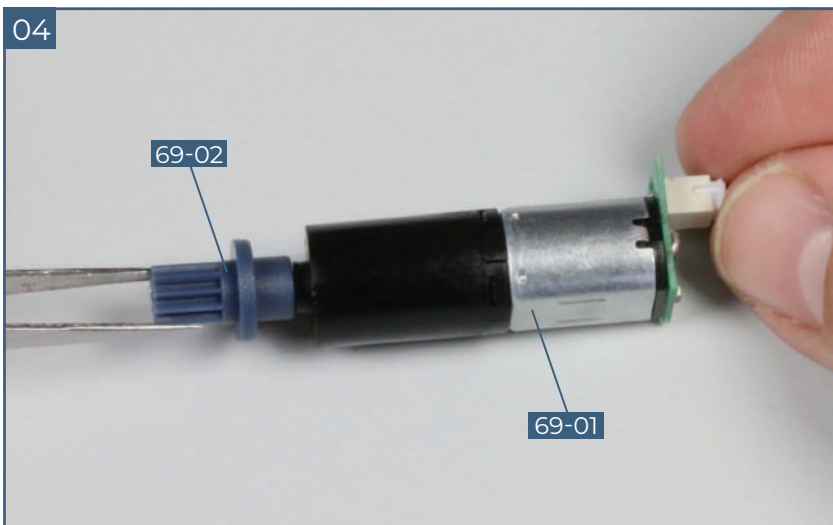
Take the cable **69-05** and the cable label **69-04**.
Remove the label from its backing.



Wrap the label around one end of the cable **69-05**,
close to one of the connectors.

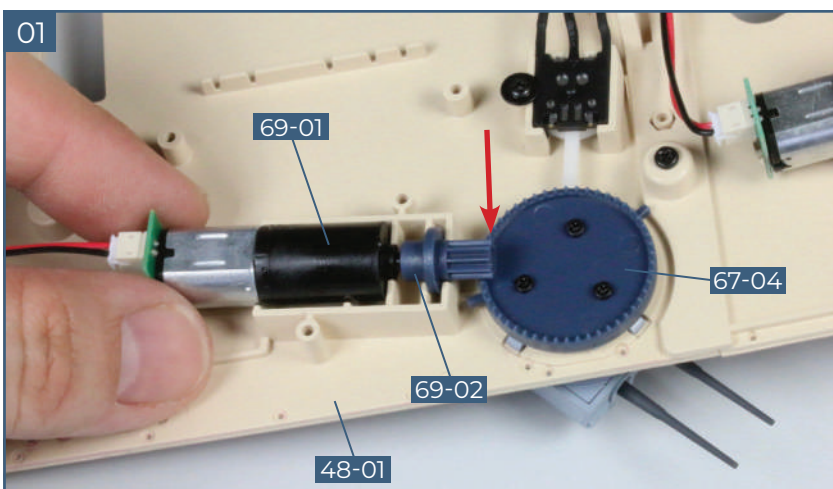


Fit the connector on the unlabelled end of cable **69-05** into the socket in the circuit board on the motor **69-01**.

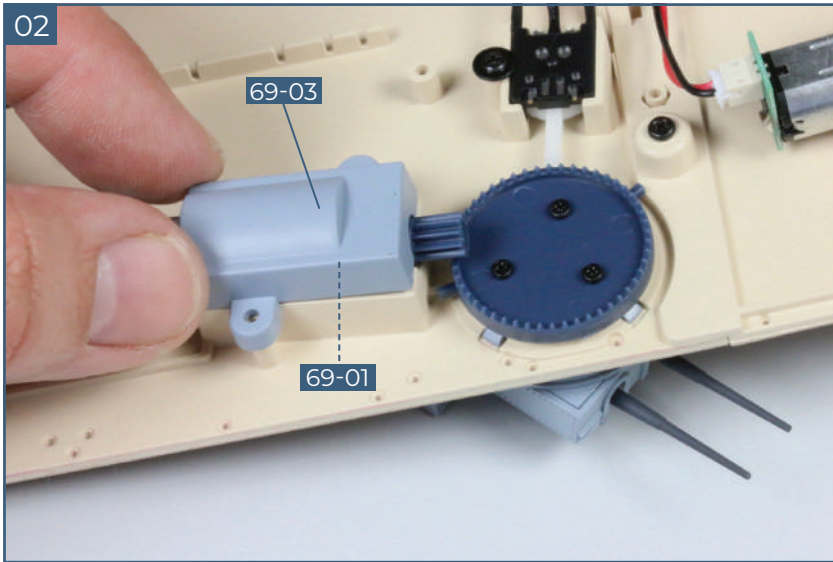


Fit the cog **69-02** over the shaft of the motor **69-01**, as shown.

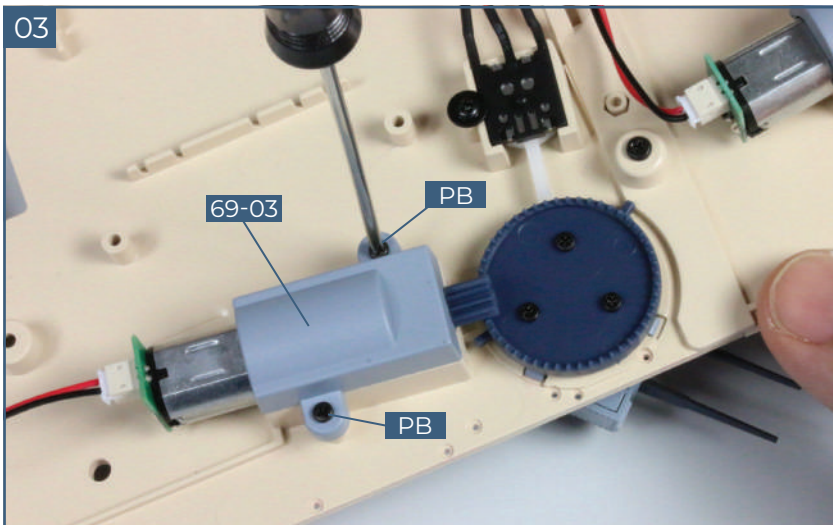
02. FITTING THE MOTOR TO THE UPPER DECK



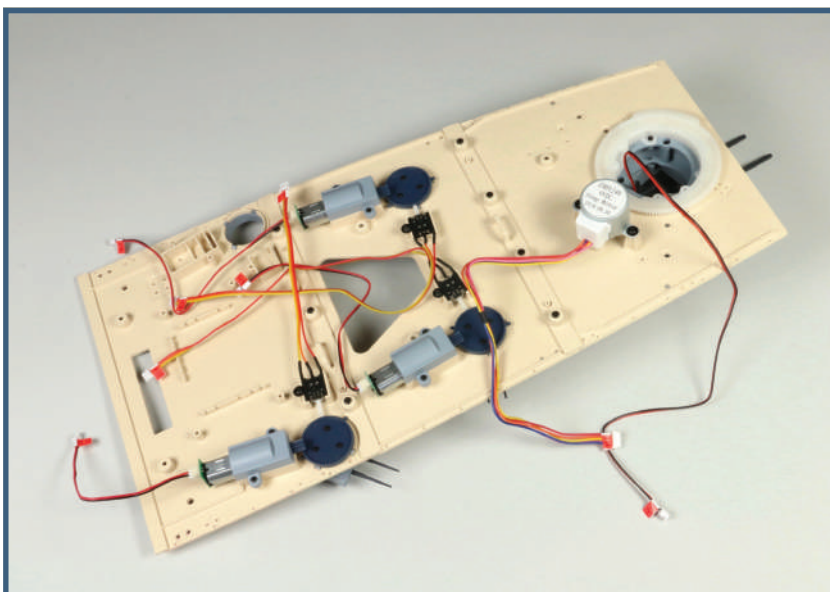
Take the upper deck structure **19-01/22-01/48-01** and carefully turn it upside down. Fit the motor **69-01** into the holder on the underside of deck section **48-01**. The teeth of cog **69-02** engage with cog **67-04** (arrow).



Fit the motor housing **69-03** over the motor **69-01**. The two screw holes on the side of the cover should align with the screw sockets on the underside of the upper deck.



Whilst supporting the deck from below, fix the motor housing in place with two **PB** screws.

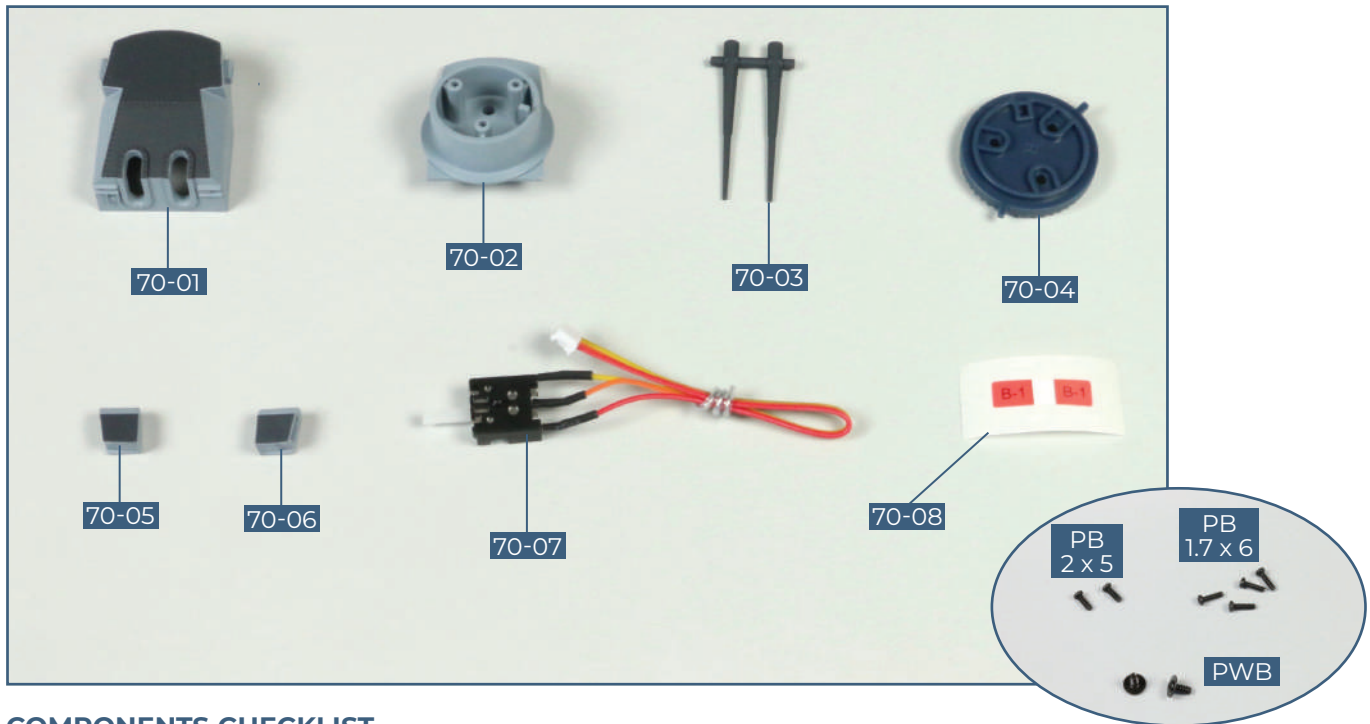


Completed work

The motor for the third 15cm gun has been fitted to the underside of the upper deck.

STAGE 70

THE FOURTH 15cm GUN TURRET



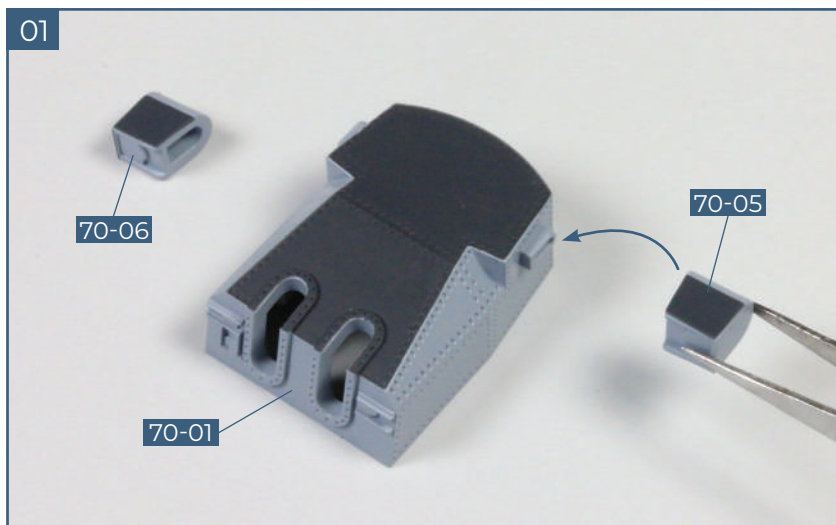
COMPONENTS CHECKLIST

70-01: 15cm gun housing
(SBII – second starboard turret)
70-02: Gun turret base plate
70-03: Gun barrels with cradle

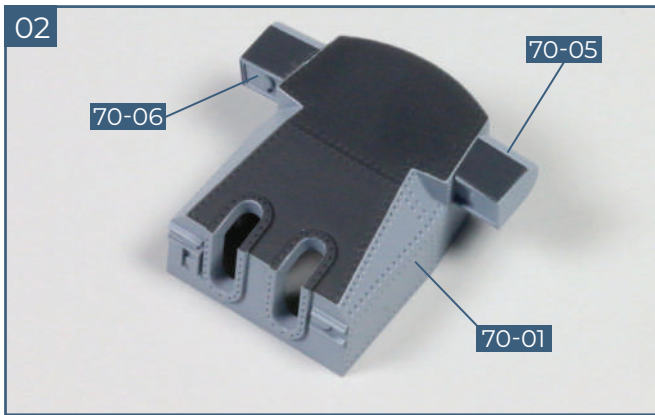
70-04: Cog
70-05: Left rangefinder hood
70-06: Right rangefinder hood
70-07: Cable and switch

70-08: Cable label
PB: Two 2 x 5mm PB screws
PB: Four 1.7 x 6mm PB screws
PWB: Two 2.3 x 4mm PWB screws

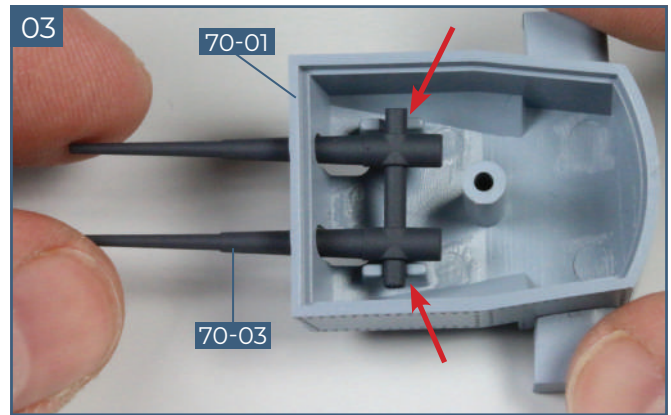
01. ASSEMBLY OF THE 15cm GUN TURRET



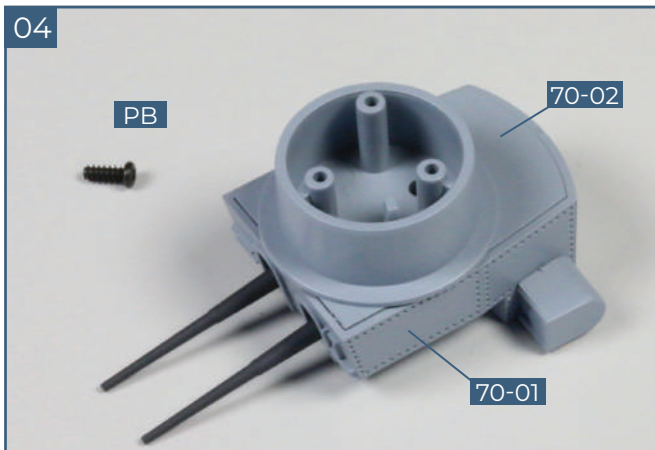
Take the gun turret housing **70-01** and the left rangefinder hood **70-05**. Check the fit of part **70-05** on the left-hand side of part **70-01**, as indicated by the arrow. Apply a little superglue to the rim of the housing **70-05** and fix in place.



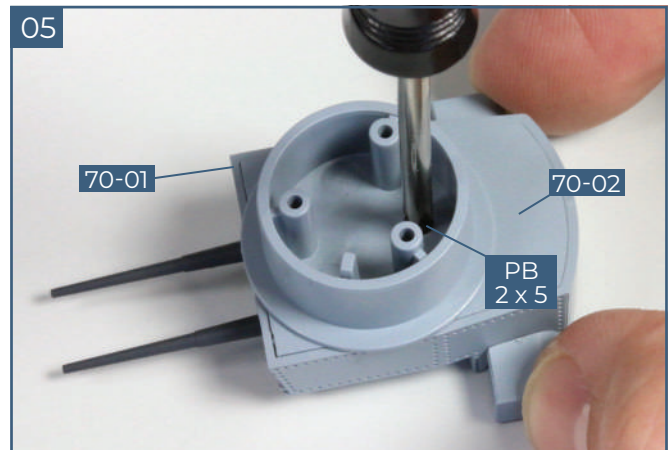
Fix the right rangefinder hood **70-06** to the right-hand side of the gun turret housing in the same way.



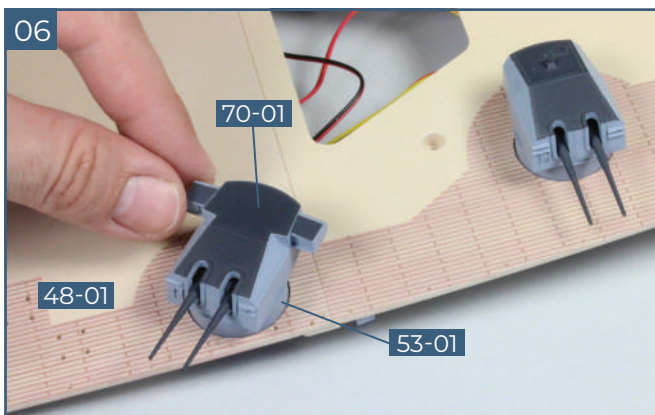
Fit the gun barrels **70-03** through the holes in the front of the gun turret **70-01** and position the cradle so that the two tabs fit into recesses in the gun turret (see arrows).



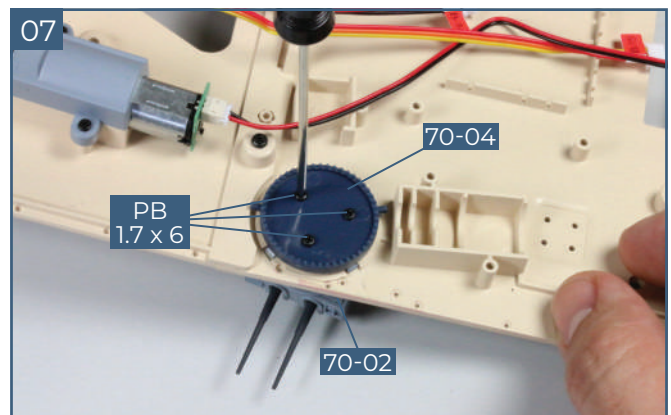
Position the gun turret base plate **70-02** on the underside of the gun turret housing **70-01** as shown.



Fix the base plate **70-02** in place with one **PB 2 x 5mm** screw.

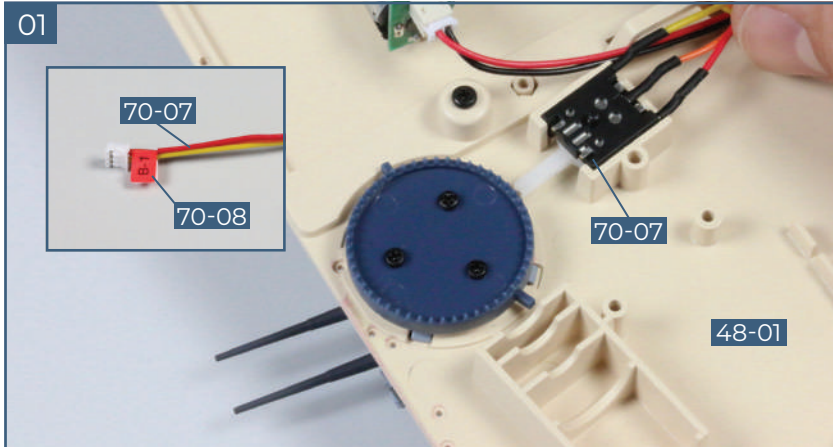


Take the upper deck assembly **19-01/22-01/48-01**. Fit the gun turret assembly into the barbettes **53-01**, in the upper deck section **48-01**.

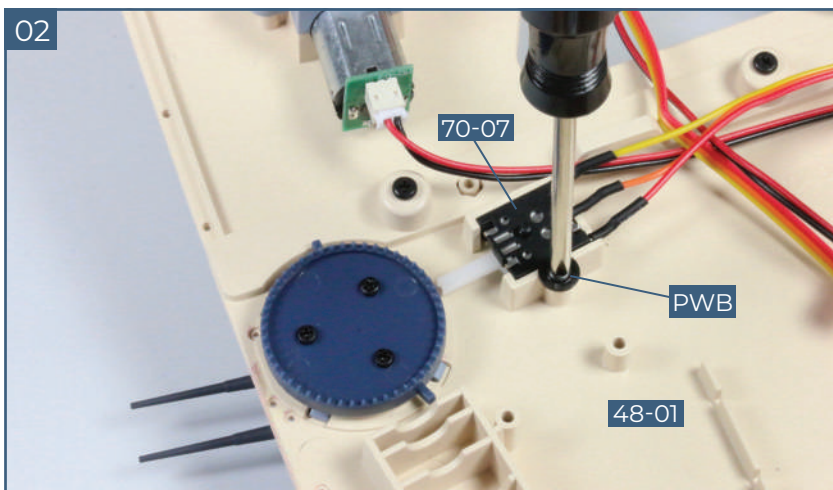


Holding the gun turret assembly in place, carefully turn over the deck assembly. Fit the cog **70-04** in place on the underside of the gun turret. A tab on part **70-02** fits into a notch in part **70-04**. Fix in place with three **PB 1.7 x 6mm** screws.

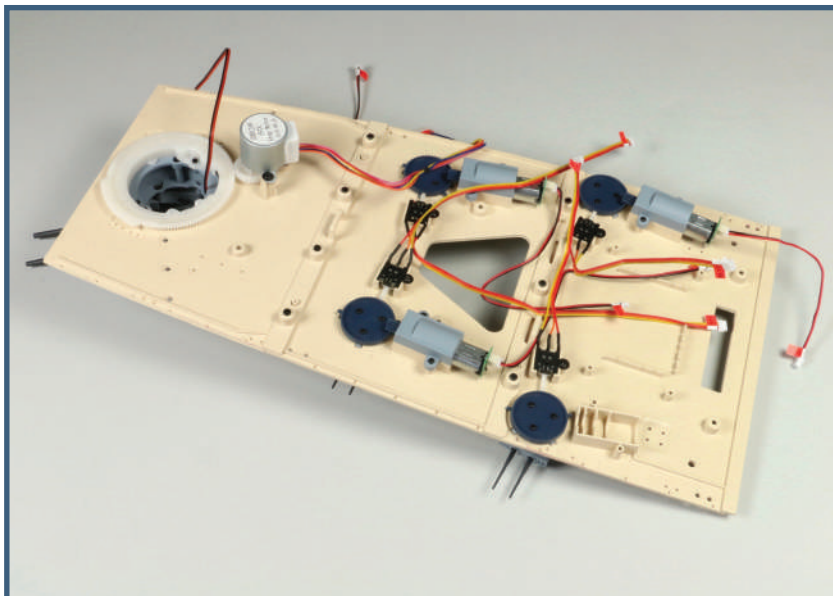
02. FITTING THE SWITCH



Wrap the cable label **70-08** around the switch cable **70-07** near the connector. Fit the switch on the other end of the cable **70-07** into the recess near the gun turret, on the underside of deck section **48-01**.



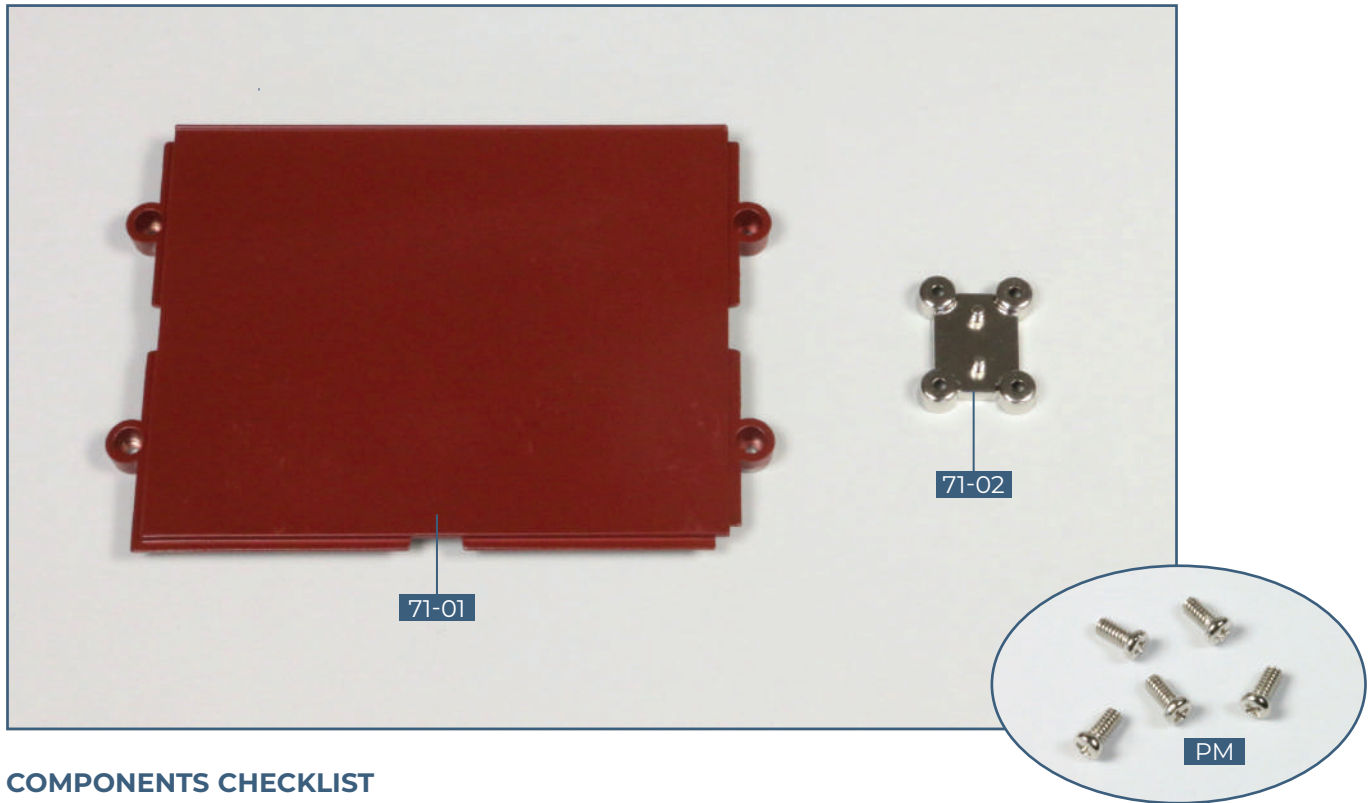
Fix the switch **70-07** in place with a **PWB** screw.



Completed work

The fourth 15cm gun, complete with switch, has been fitted into the deck assembly. This is the second starboard 15cm gun, SBII. A motor for the gun will be supplied in a future stage.

STAGE 71 THE NEXT KEEL SECTION



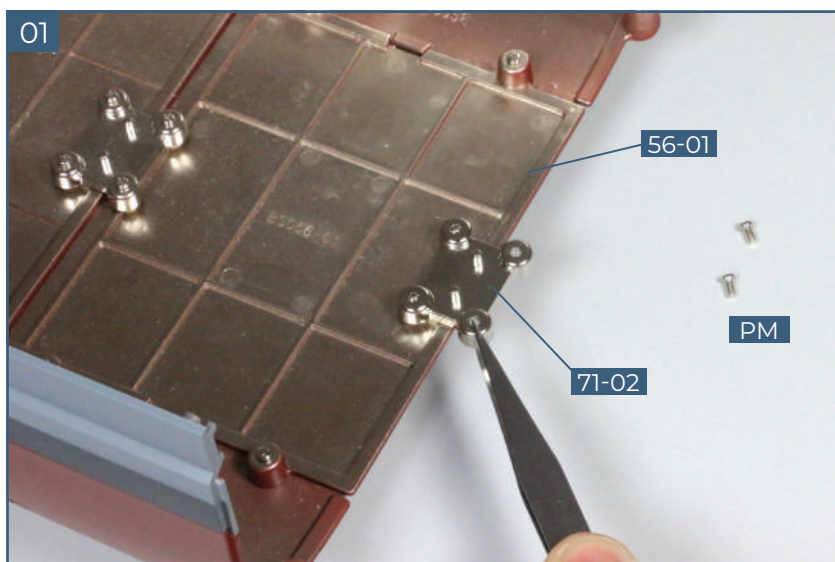
COMPONENTS CHECKLIST

71-01: Keel section

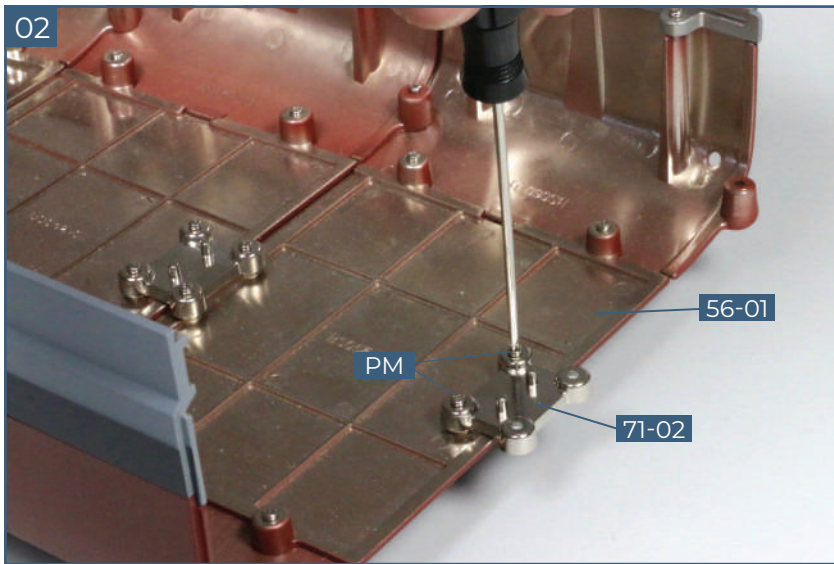
PM: Five 2 x 4mm PM screws

71-02: Connector

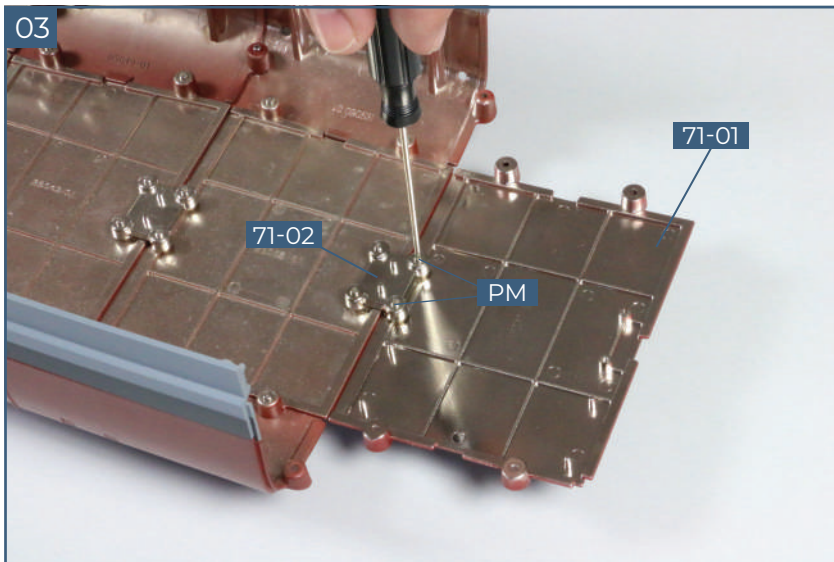
01. FITTING THE KEEL SECTION



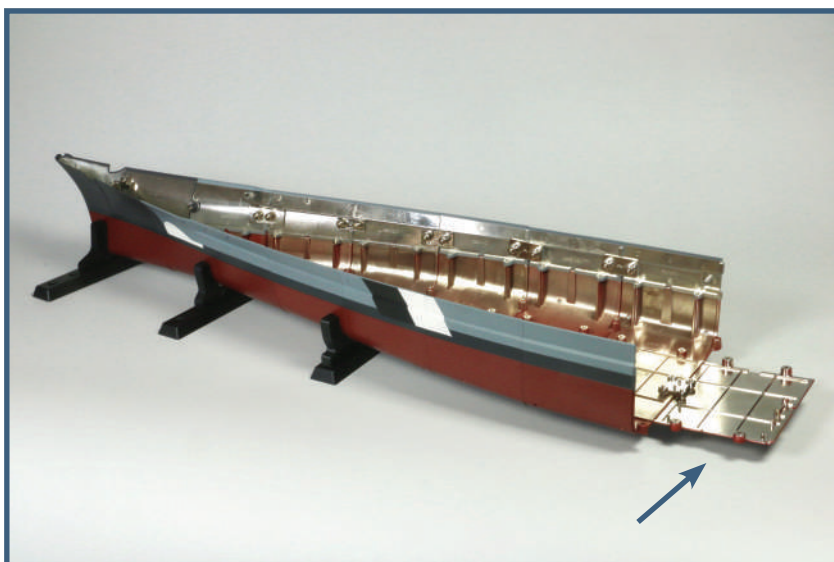
Take the hull assembly from stage 68. Fit the sockets on the connector **71-02** over the raised screw sockets on the edge of part **56-01**.



Fix the connector **71-02** in place with two **PM** screws.



Fit the next keel section **71-01** under the connector **71-02** so that the screw sockets fit in place. Fix in place with two **PM** screws.

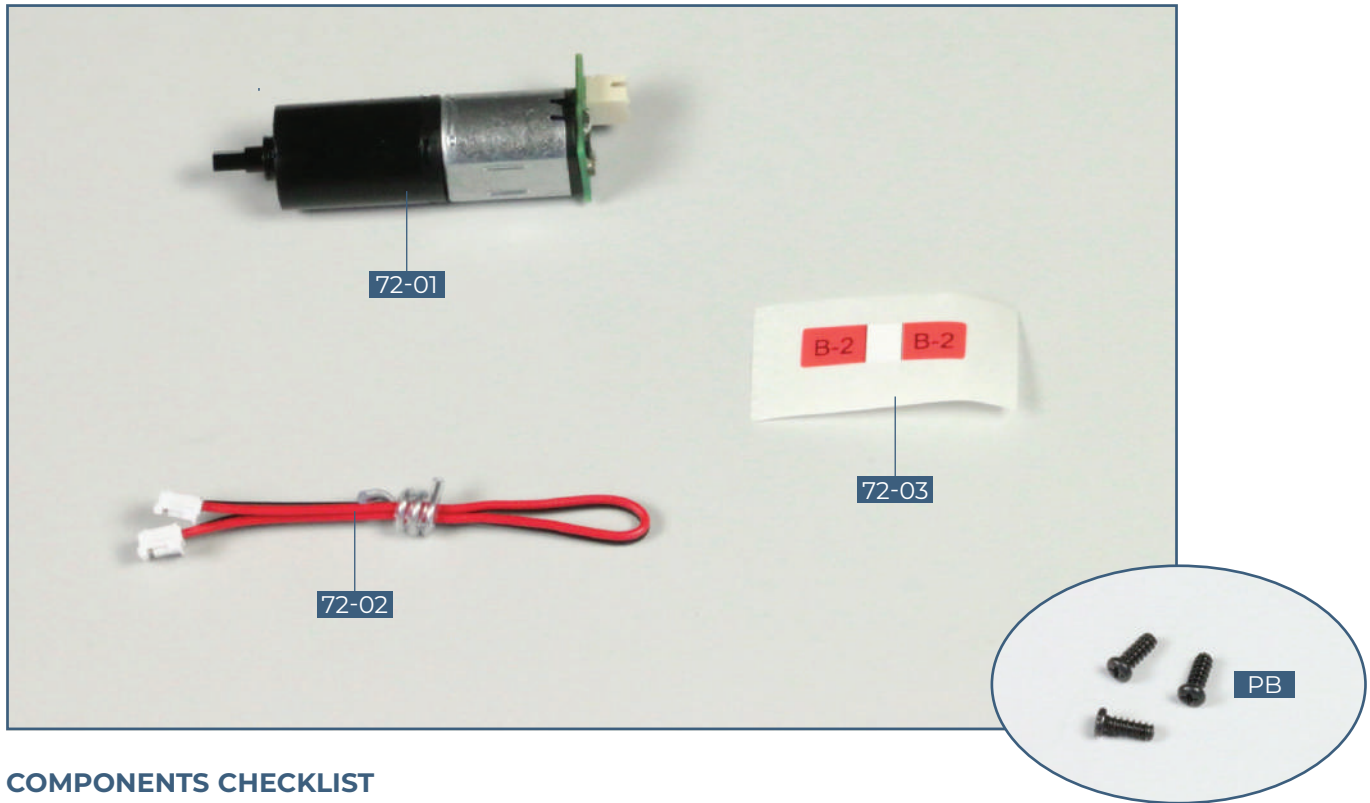


Completed work

The next keel section has been fitted to the hull assembly.

STAGE 72

MOTOR FOR THE FOURTH 15cm GUN



COMPONENTS CHECKLIST

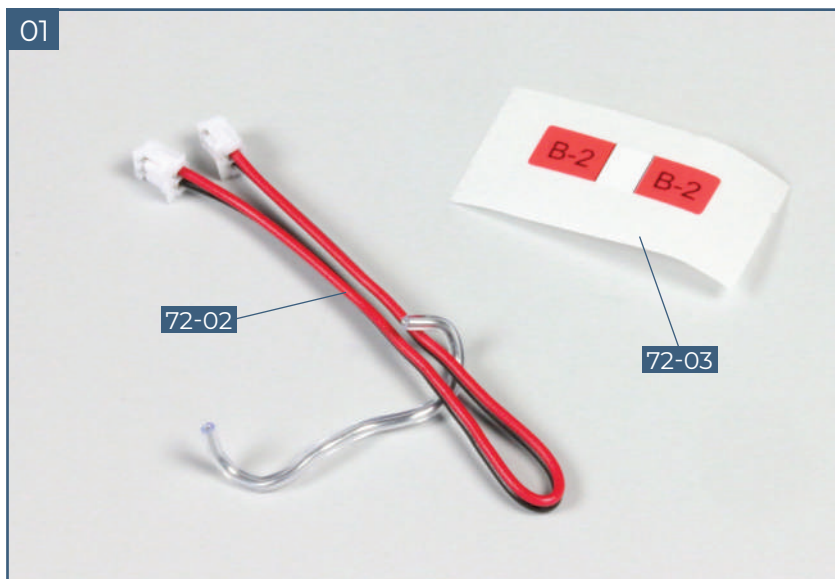
72-01: Motor

72-02: Cable for the motor

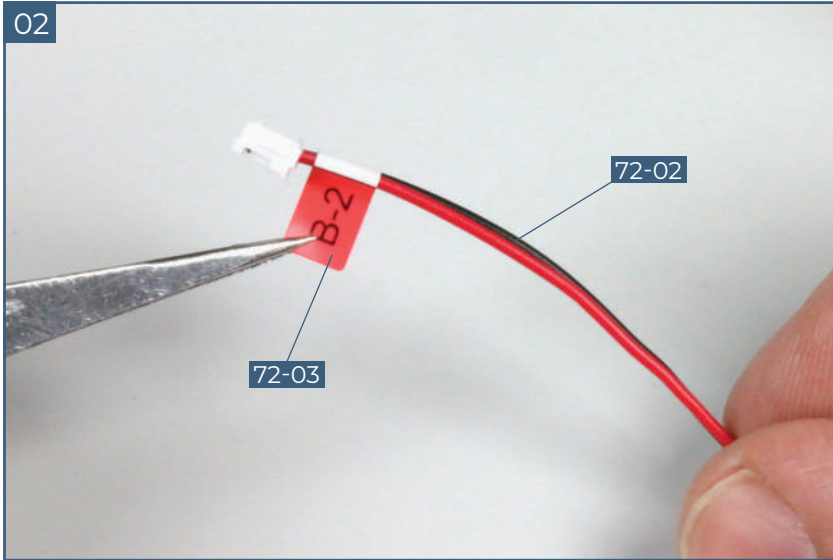
72-03: Cable label

PB: Three 2 x 5mm PB screws

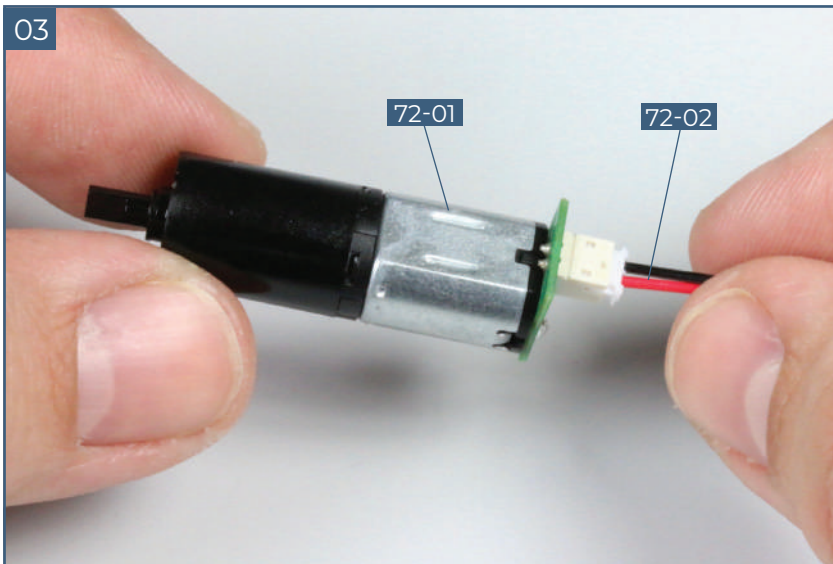
01. PREPARING THE MOTOR



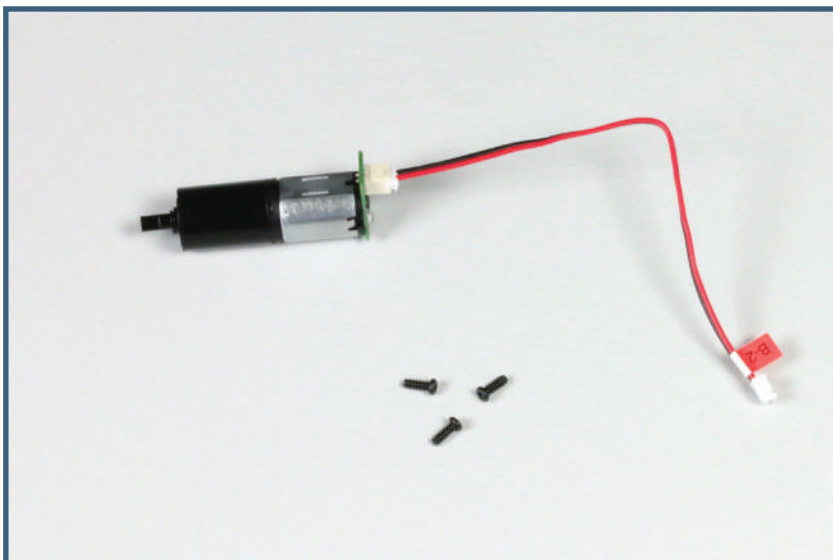
Take the cable **72-02** and the cable label **72-03**. Remove the tie from the cable and straighten it out.



Remove the backing from the cable label **72-03** and wrap it around one end of the cable **72-02** near the connector as shown.



Plug the connector on the other end of the cable **72-02** into the circuit board on the motor **72-01** as shown.

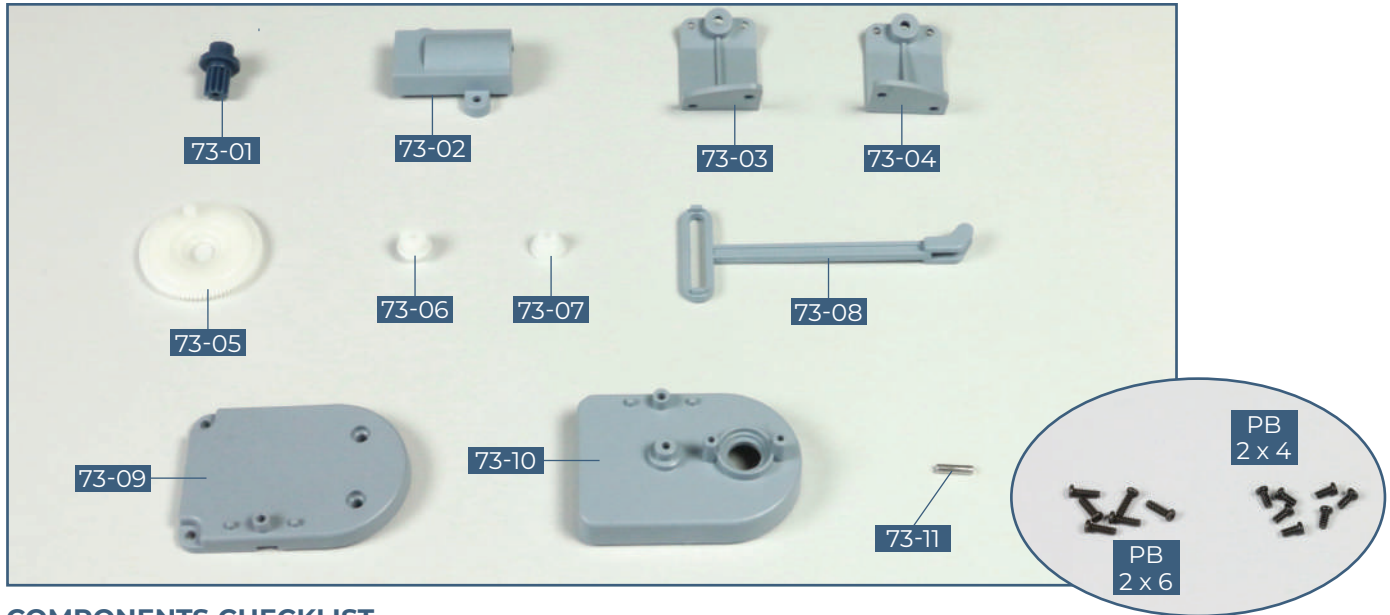


Completed work

The cable and motor for the fourth 15cm gun are ready to fit to the model. The three **PB** screws will be used in the next stage, so store them carefully.

STAGE 73

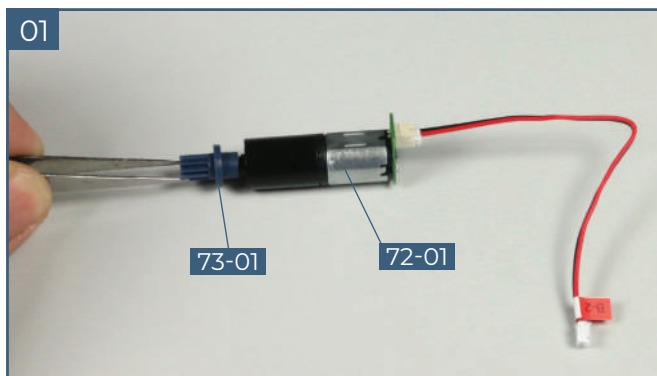
GEAR ASSEMBLY FOR THE SECOND 38cm GUN



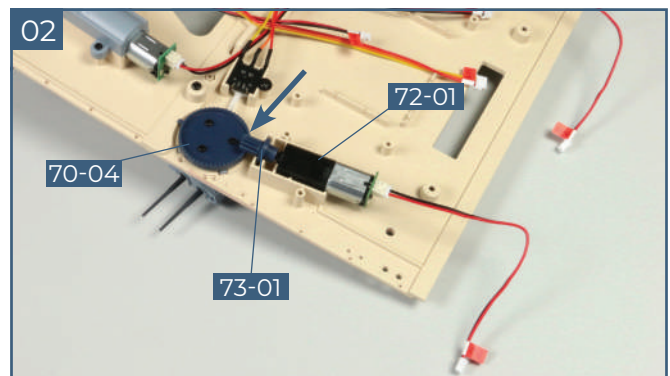
COMPONENTS CHECKLIST

- | | | | |
|--|---|----------------------------|------------------------------------|
| 73-01: Cog | 73-04: Right support bracket (R) | 73-08: Gear arm | PB: Six 2 x 6mm PB screws |
| 73-02: Motor housing | 73-05: Cog | 73-09: Gear housing | PB: Seven 2 x 4mm PB screws |
| 73-03: Left support bracket (L) | 73-06: Cog | 73-10: Gear housing | |
| | 73-07: Hub | 73-11: Shaft | |

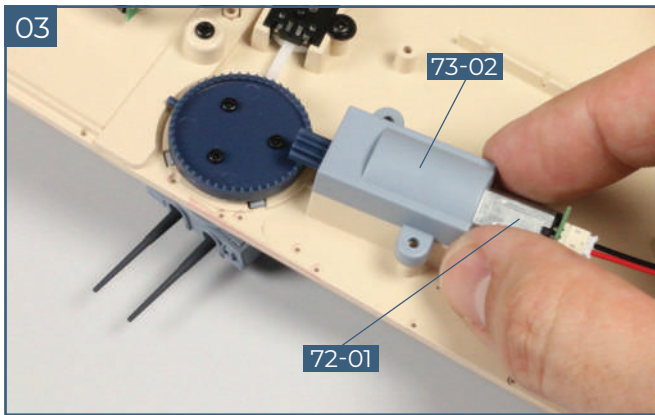
01. FITTING THE MOTOR FOR THE FOURTH 15cm GUN



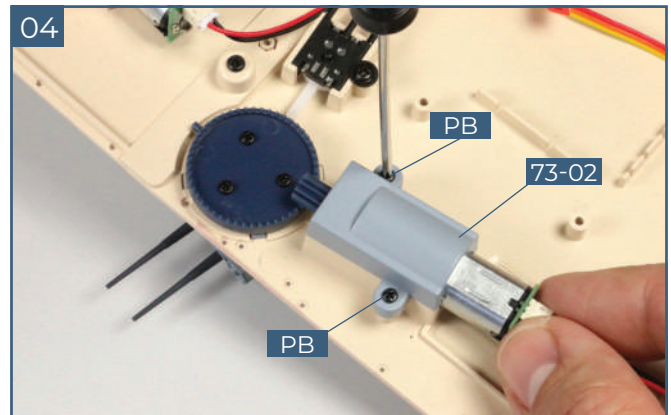
Take the motor **72-01** from the previous issue. Fit the cog **73-01** on to the shaft of the motor.



Take the deck assembly **19-01/22-01/48-01** and position it upside down on your work surface, taking care not to damage any fittings. Fit the motor **72-01** into the recess so that the teeth on the cog **73-01** engage with the teeth on the cog **70-04** (arrow).



Fit the motor housing **73-02** over the motor **72-01**, as shown.

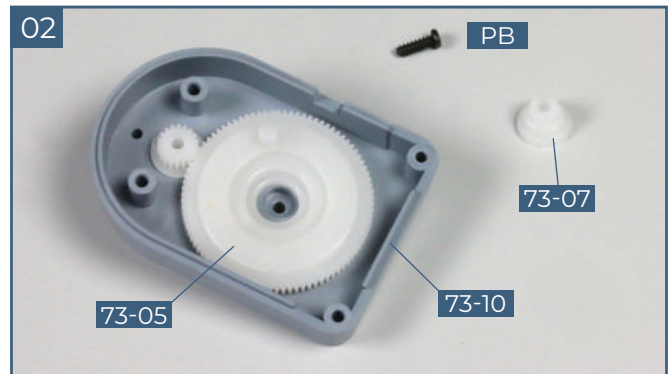


Fix the motor housing in place using two **PB** 2 x 5mm screws, supplied with stage 72.

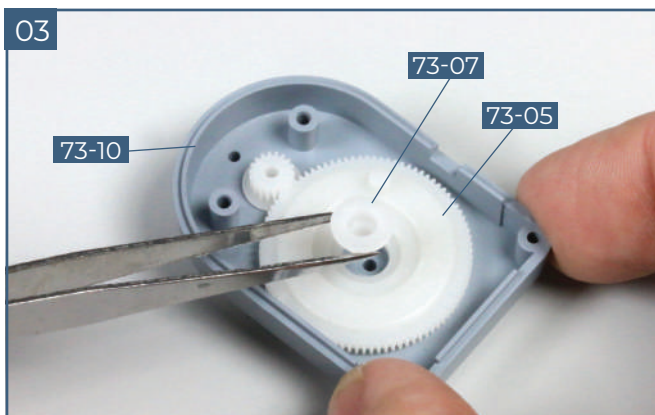
02. GEAR ASSEMBLY FOR THE ELEVATION OF THE SECOND 38cm GUN TURRET



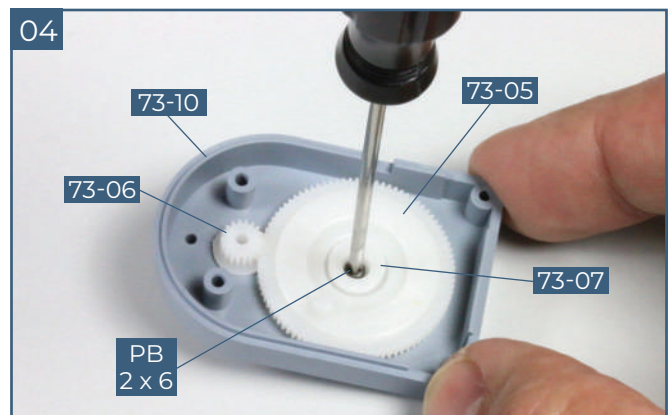
Take the gear housing **73-10** and fit the cog **73-06** into the large hole, as shown.



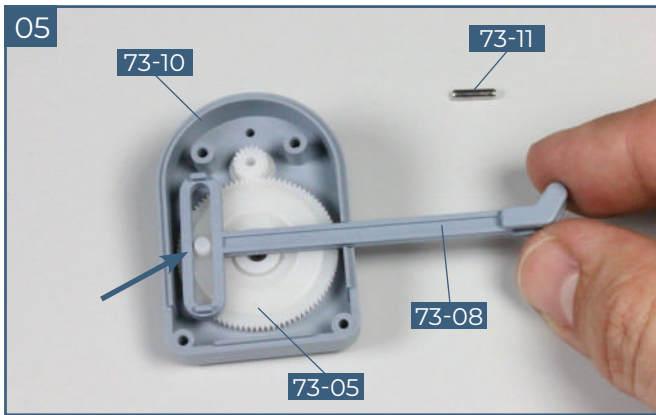
Fit the large cog **73-05**, with the peg upwards, centrally over the small hole in part **73-10**, as shown.



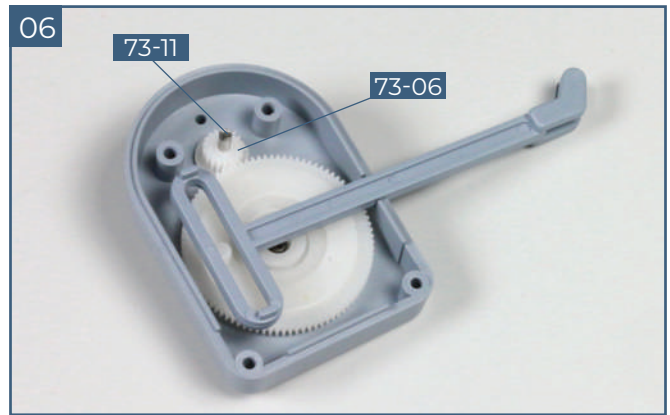
Fit the hub **73-07** into the centre of the large cog **73-05**, so that the central holes are aligned with the hole in part **73-10**.



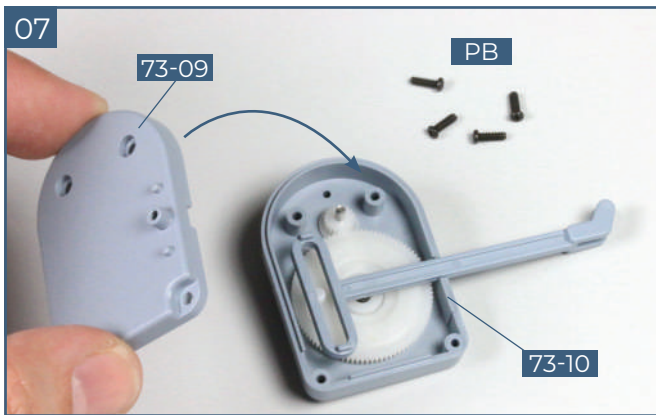
Fix the hub **73-07** and large cog **73-05** in place with a **PB** 2 x 6mm screw. Note that the edge of cog **73-05** fits over the rim of cog **73-06**, holding it in place.



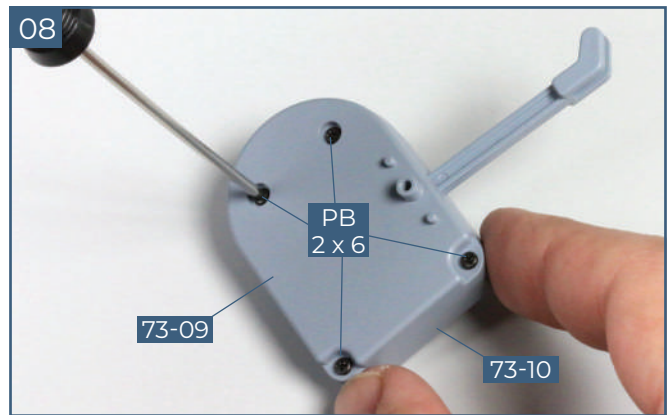
Position the peg on cog **73-05** on the left-hand side of the assembly as shown (arrow). Fit the slot in the gear arm **73-08** over the peg, taking care to position it in the correct orientation.



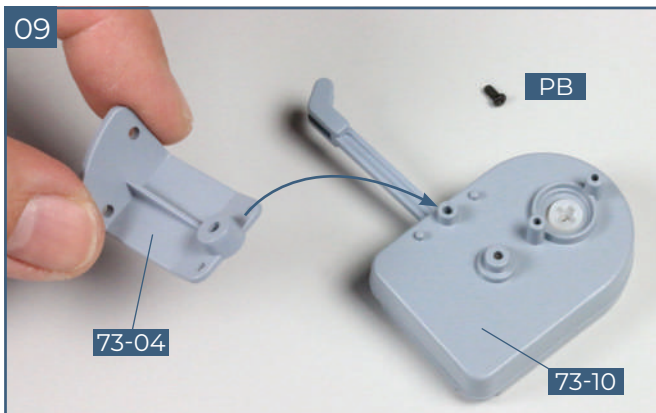
Fit the shaft **73-11** into the hole in cog **73-06**.



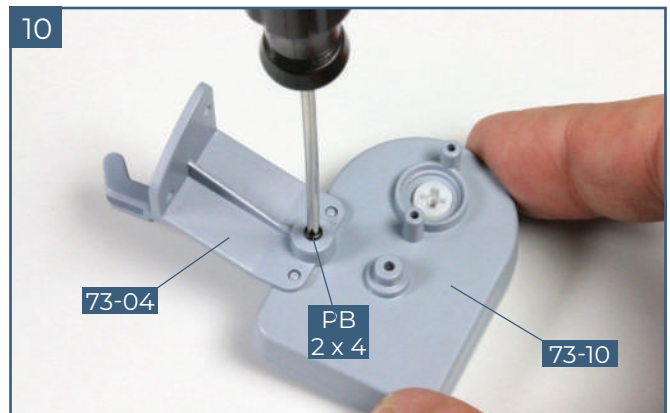
After carefully checking the parts are positioned correctly, fit the second part of the gear housing **73-09** over the gear arrangement, as indicated.



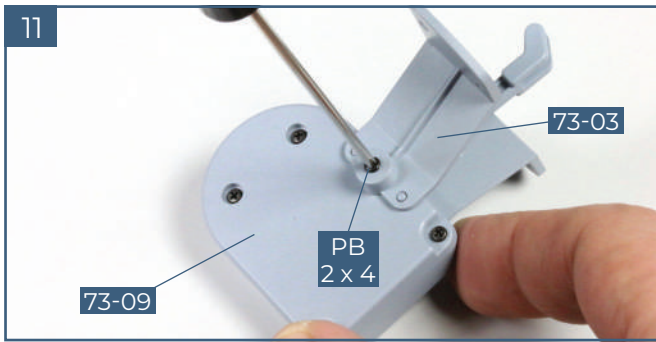
Fix the two halves of the gear housing **73-09** and **73-10** together as shown, using four **PB** 2 x 6mm screws.



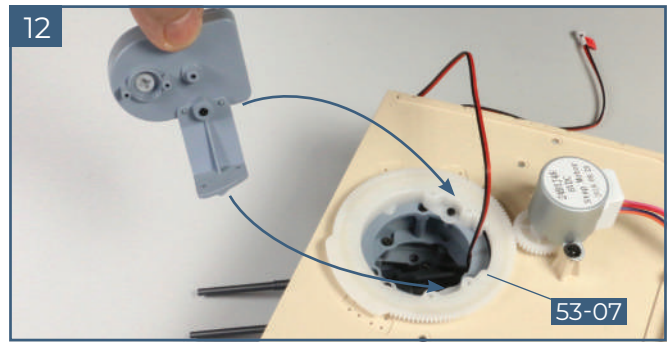
Turn the gear assembly over. Take the right support bracket **73-04** (marked R) and identify the fixing point on the housing **73-10**, as indicated by the arrow.



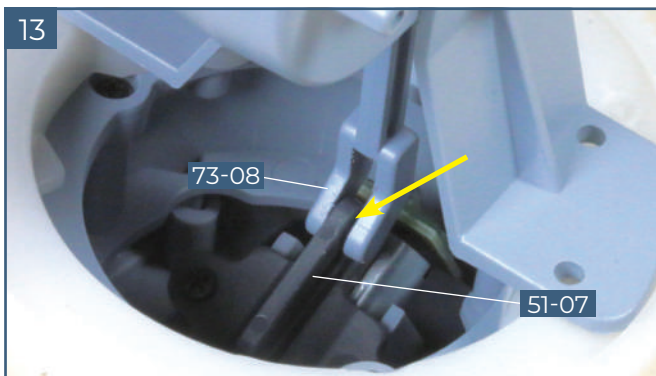
Fix the support bracket **73-04** in place with a **PB** 2 x 4mm screw.



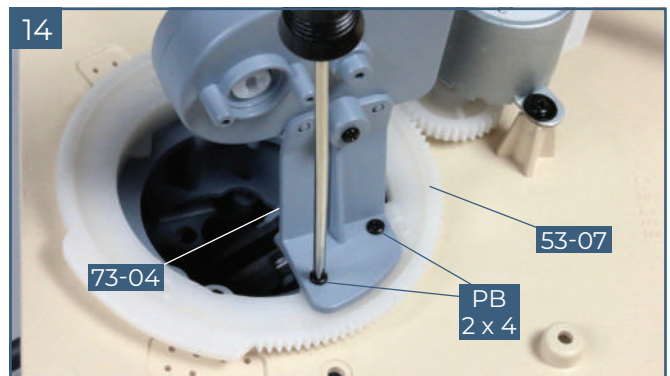
Turn the gear assembly over and fix the left support bracket **73-03** in place on the gear housing **73-09** with a **PB 2 x 4mm** screw, as shown.



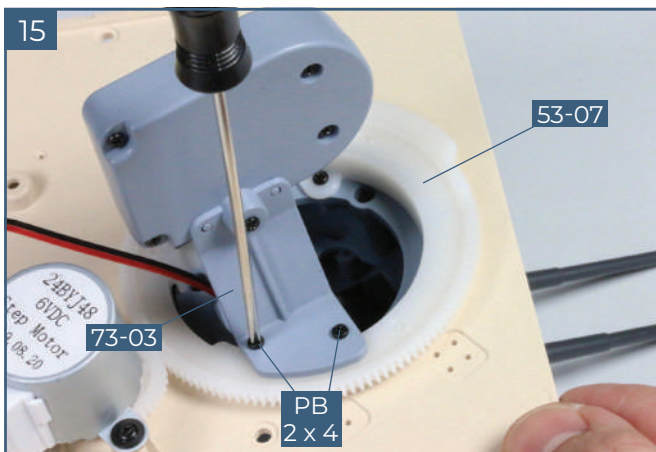
Take the deck assembly from step 4. Identify the cog **53-07** on the underside of the deck, beneath the second 38cm gun. The screw holes in the angled sides of the support brackets **73-04** and **73-03** align with screw holes in the cog **53-07**, as indicated.



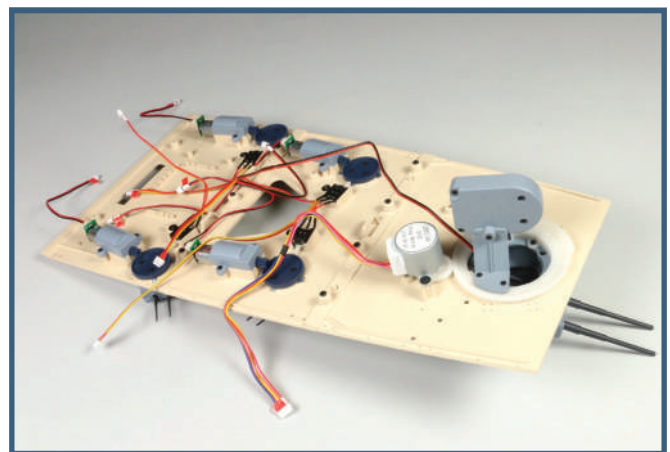
As you position the gear housing, guide the end of the gear arm **73-08** round the motor mounting **51-07**. Two small pegs on the end of the gear arm snap into place on the motor mounting (arrow). Make sure the parts are fully supported whilst doing this.



Fix the gear housing support bracket **73-04** in place on the cog **53-07** with two **PB 2 x 4mm** screws.



Fix the other gear housing support bracket **73-03** in place with two **PB 2 x 4mm** screws.

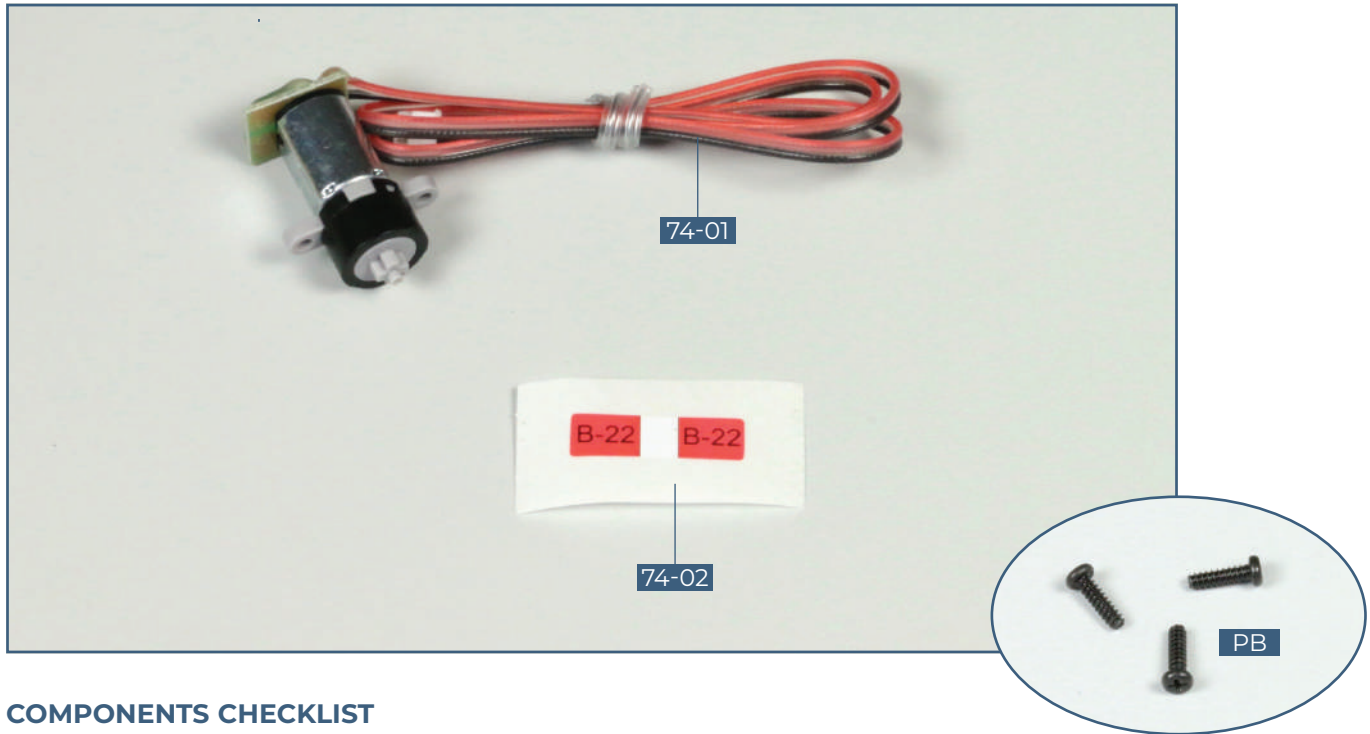


Completed work

The motor for the fourth 15cm gun has been fitted. The gears for the elevation control of the second 38cm gun turret have been assembled and fitted in place.

STAGE 74

ELEVATION MOTOR FOR THE SECOND 38cm GUN TURRET



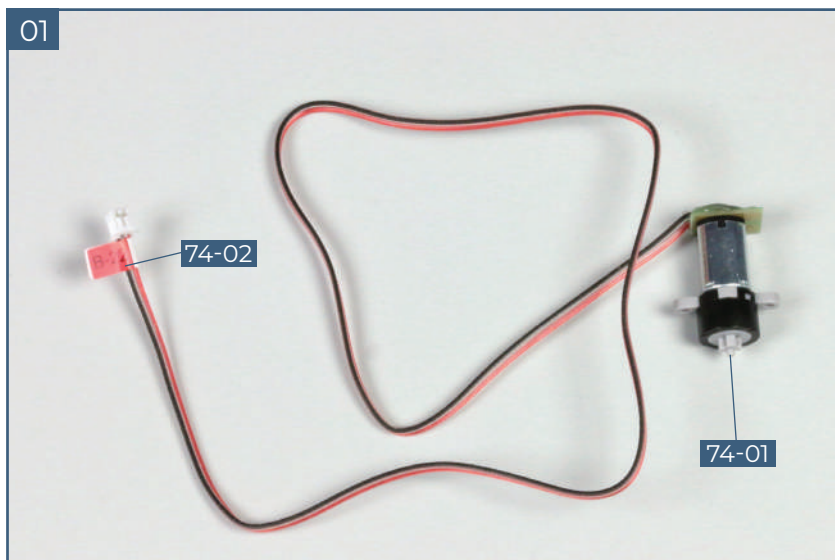
COMPONENTS CHECKLIST

74-01: Motor

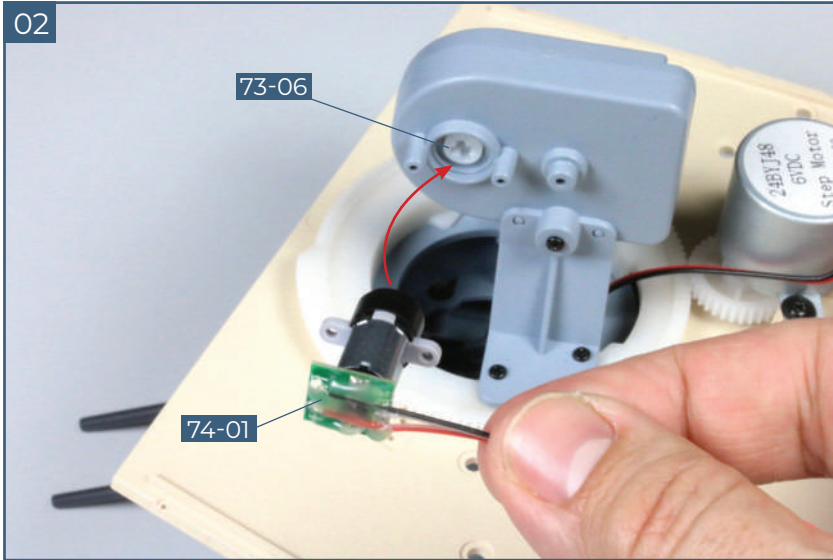
PB: Three 1.7 x 6mm PB screws

74-02: Cable label

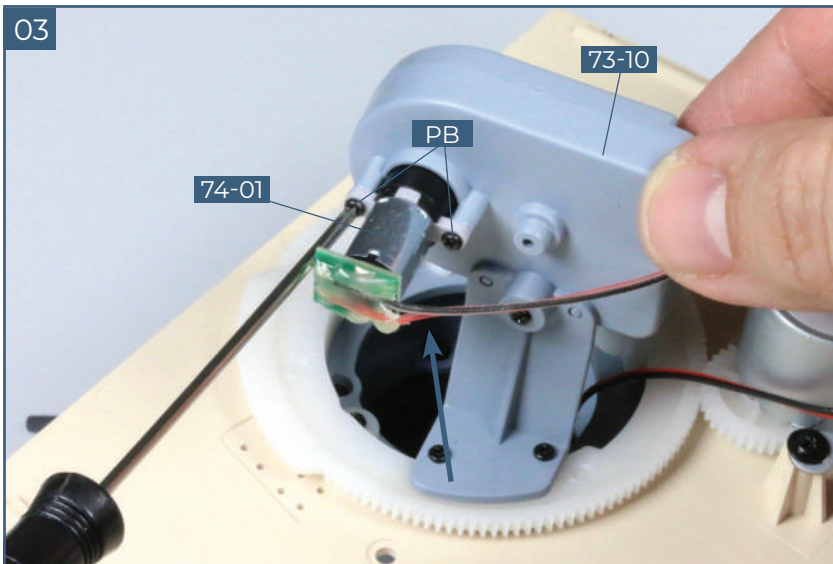
01. FITTING THE MOTOR



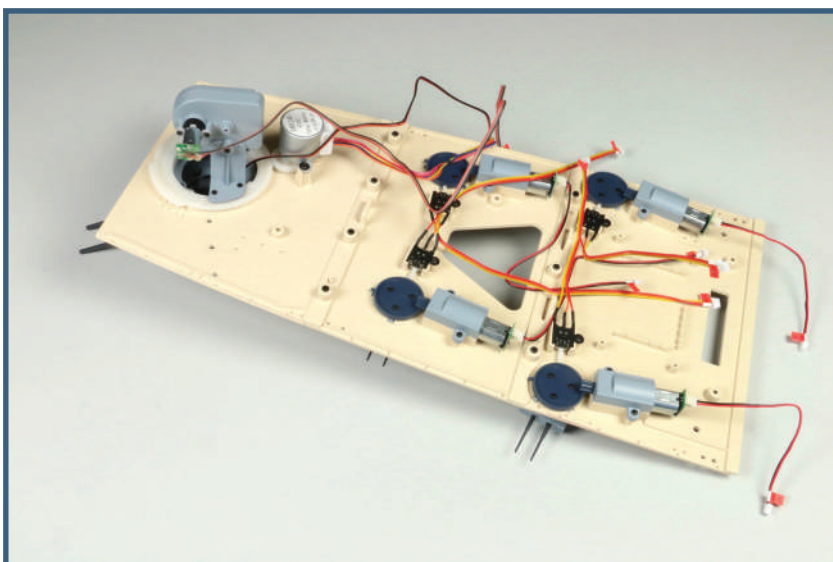
Take the motor **74-01** with its cable. Remove the cable label **74-02** from its backing and fit it around the end of the cable near the connector.



Take the deck assembly from the previous stage with the gear housing for the second 38cm gun turret. Make sure the deck is fully supported, to avoid damage to any of the parts. Identify the cog **73-06** in the gear housing assembly. Fit the shaft of the motor **74-01** into the cog, as indicated by the arrow.



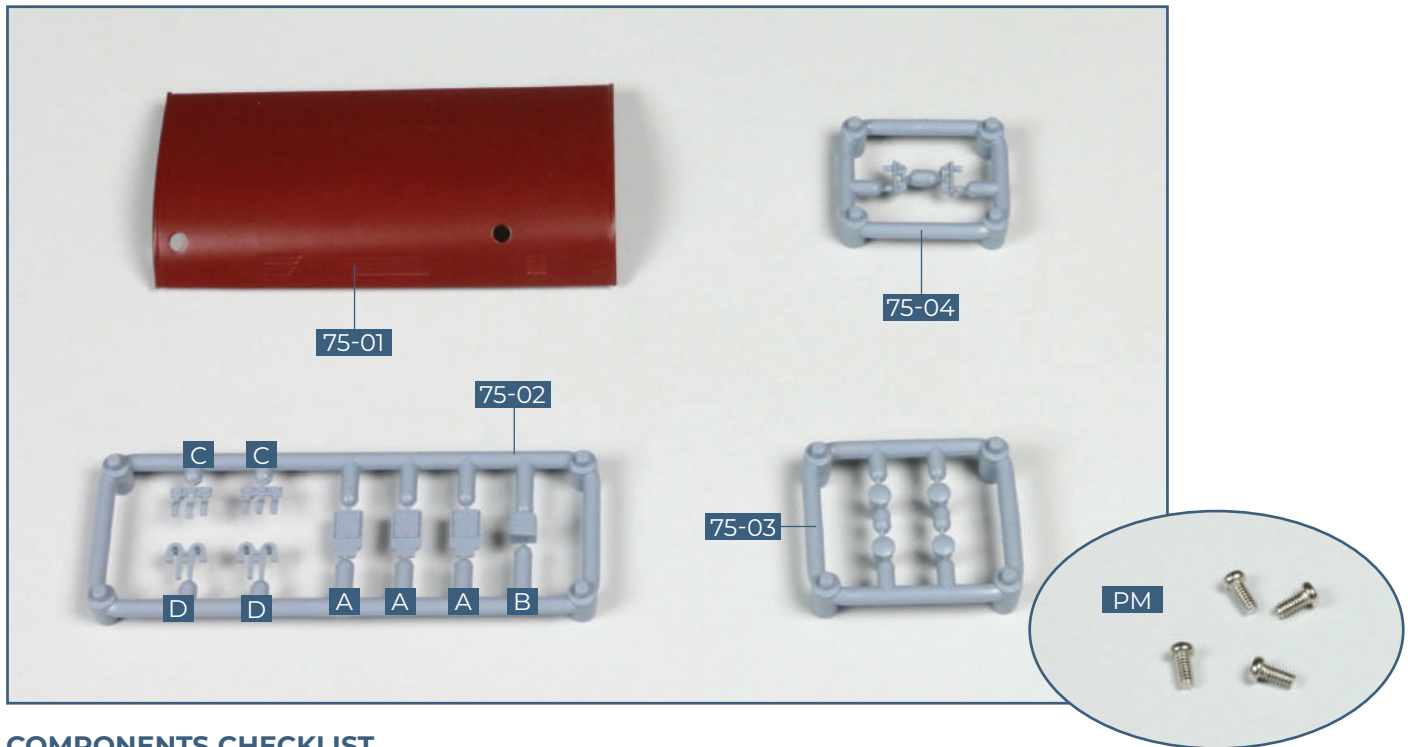
Align the screw holes in the brackets on the side of the motor **74-01** with the raised screw sockets on part **73-10**. Fix in place with two **PB** 1.7 x 6mm screws.



Completed work

The motor for the second 38cm gun has been fitted to the gears. This will control the elevation of the gun barrels.

STAGE 75 DETAILS FOR THE UPPER DECK



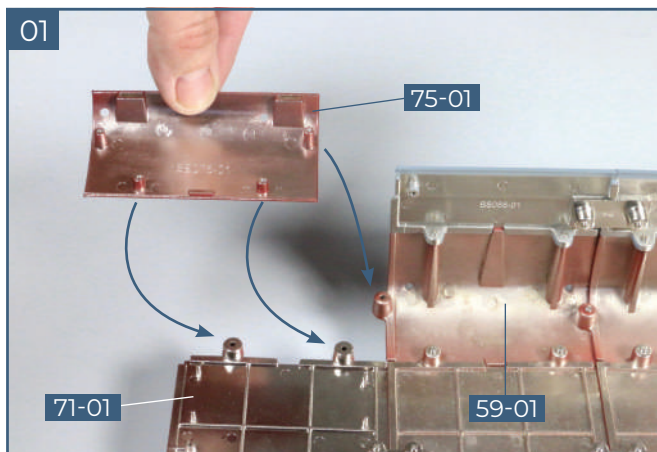
COMPONENTS CHECKLIST

75-01: Port lower hull section
75-02: Deck details (A- D)

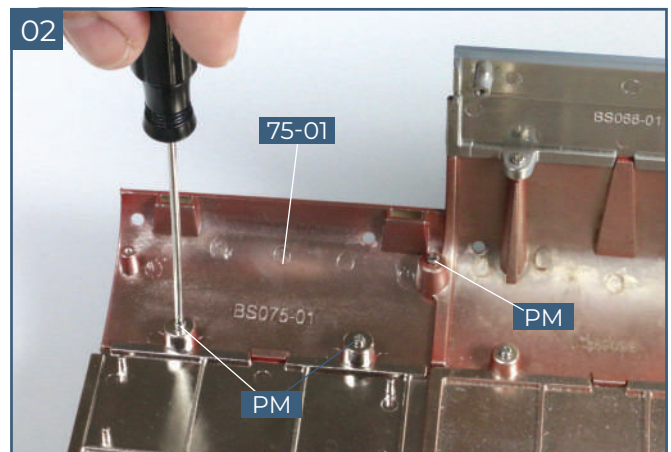
75-03: Four bollards
75-04: Two roller fairleads

PM: Four 2 x 4mm PM screws

01. FITTING THE NEXT HULL SECTION

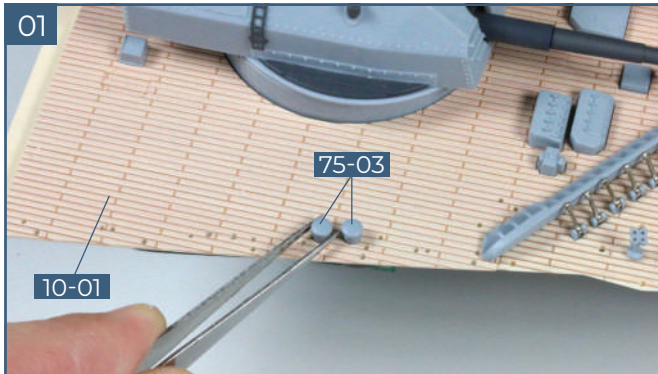


Take the hull assembly from stage 71. Check the fit of the port lower hull section **75-01** against the keel section **71-01** and the hull section **59-01**.

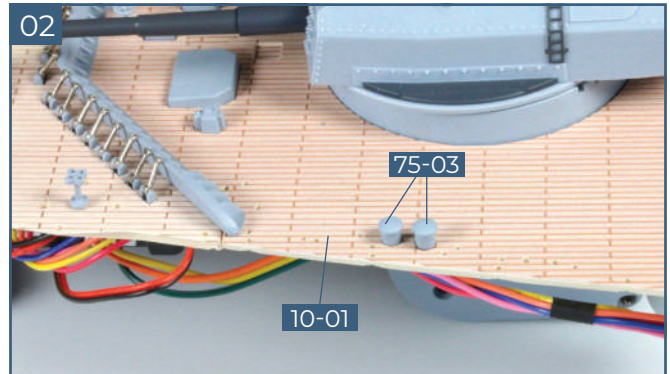


When you are happy with the fit, fix the hull section **75-01** in place using three **PM** 2 x 4mm screws.

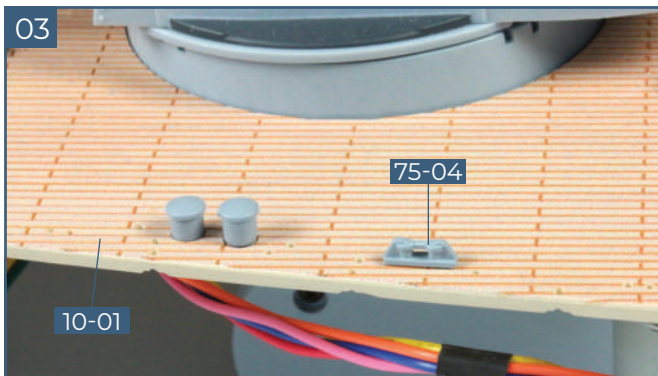
02. DETAILS FOR THE UPPER DECK AND FORWARD BARBETTE



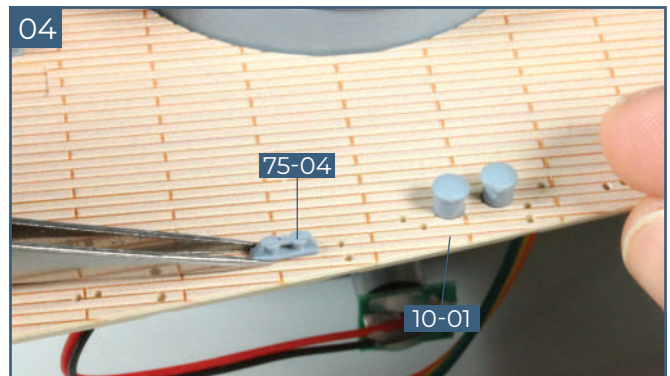
Take the upper deck assembly from stage 18. Position it carefully on your work surface, supporting it so that the gear housing and other details on the underside are not damaged. Take two bollards **75-03** and check the fit in recesses in the deck section **10-01** on the starboard side behind the breakwater, as shown. Glue them in place.



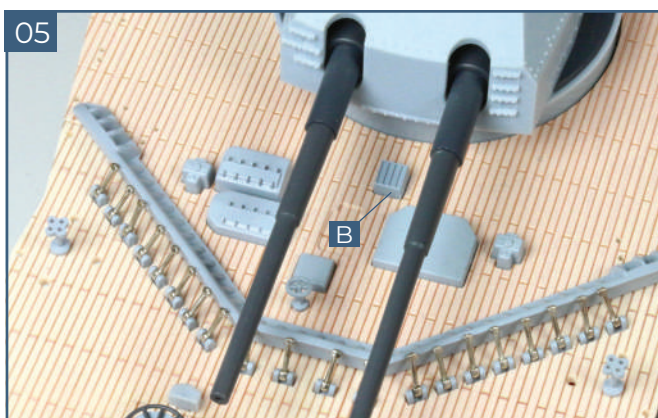
On the opposite side of the deck assembly identify the fixing point for the second pair of bollards **75-03**. Check the fit and glue in place, using a little superglue.



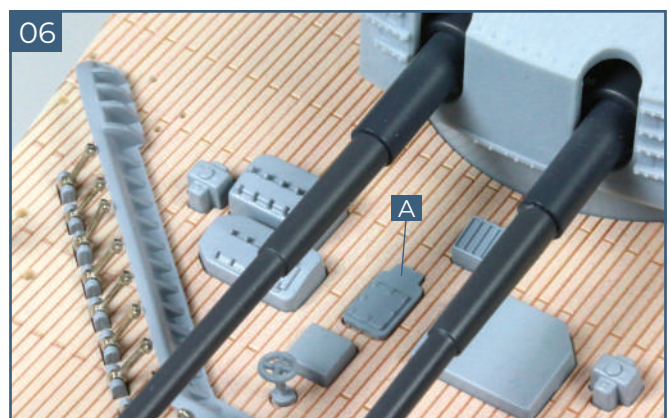
Still working on the port side of the deck, check the position of the first roller fairlead **75-04**, to the aft of the bollards. Glue in place.



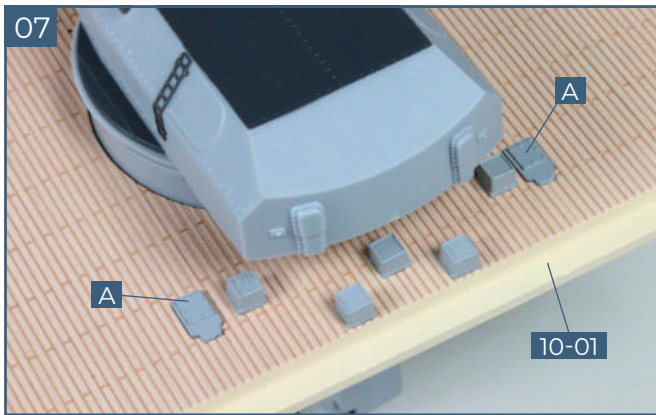
On the starboard side of the deck, glue the second roller fairlead **75-04** in place to the aft of the bollards.



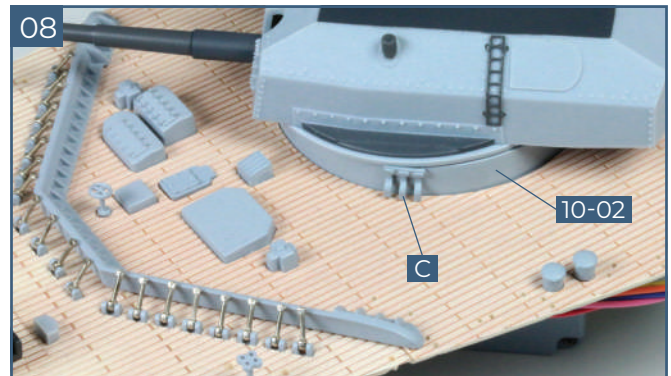
Cut part **B** from frame **75-02** and remove any rough edges. Check the position of the detail, in a recess in front of the forward 38cm gun. Glue in place.



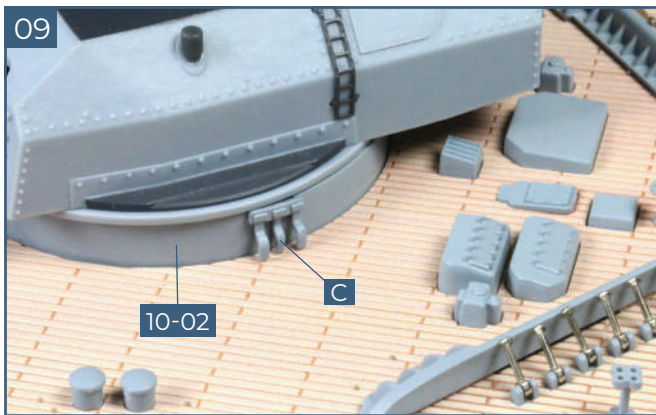
Cut the hatches **A** from frame **75-02** and fit the first one into the recess in the deck section **10-01** as shown. Glue in place.



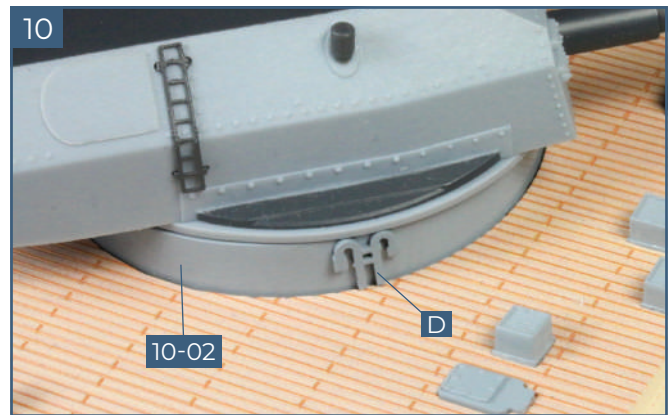
To the aft of the forward 38cm gun, fit the second and third hatches **A**, gluing in place in slight recesses in the deck, as shown.



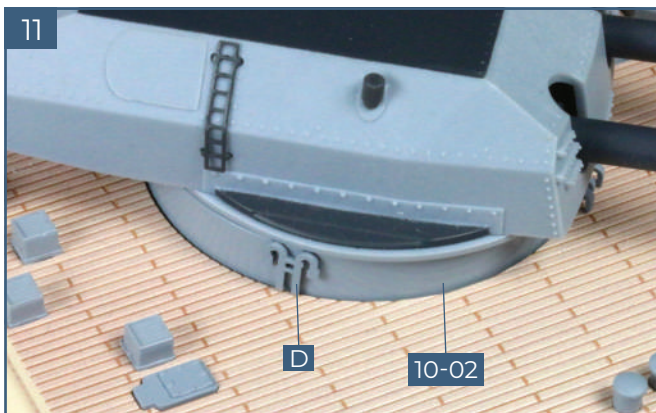
Check the instructions for turning the forward 38cm gun in stage 18. To stop the gun in the desired position, turn off the power using the switch on the battery box. Turn the gun slightly to the starboard side. Cut parts **C** from frame **75-02**. Fix one in place on the barrette as shown, using a little superglue.



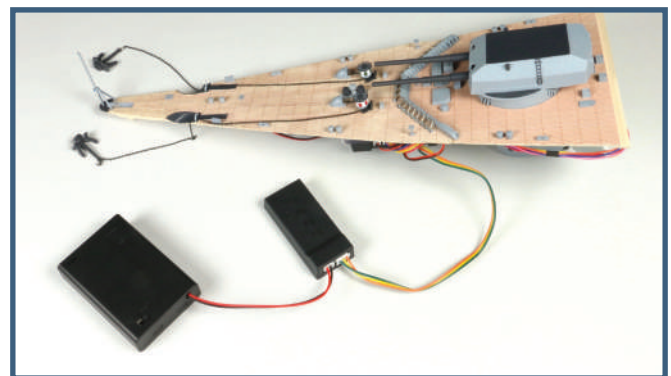
Turn the gun slightly to port. Fit the second part **C** in place on the barrette, fixing in place with a little superglue.



Turn the gun so that you can access the aft port section of the barrette. Cut the parts **D** from the frame **75-02**. Fix the first part **D** in place as shown, using a little superglue.



With the gun positioned so that you can access the aft starboard section of the barrette, fix the second part **D** in place with a little superglue, as shown.

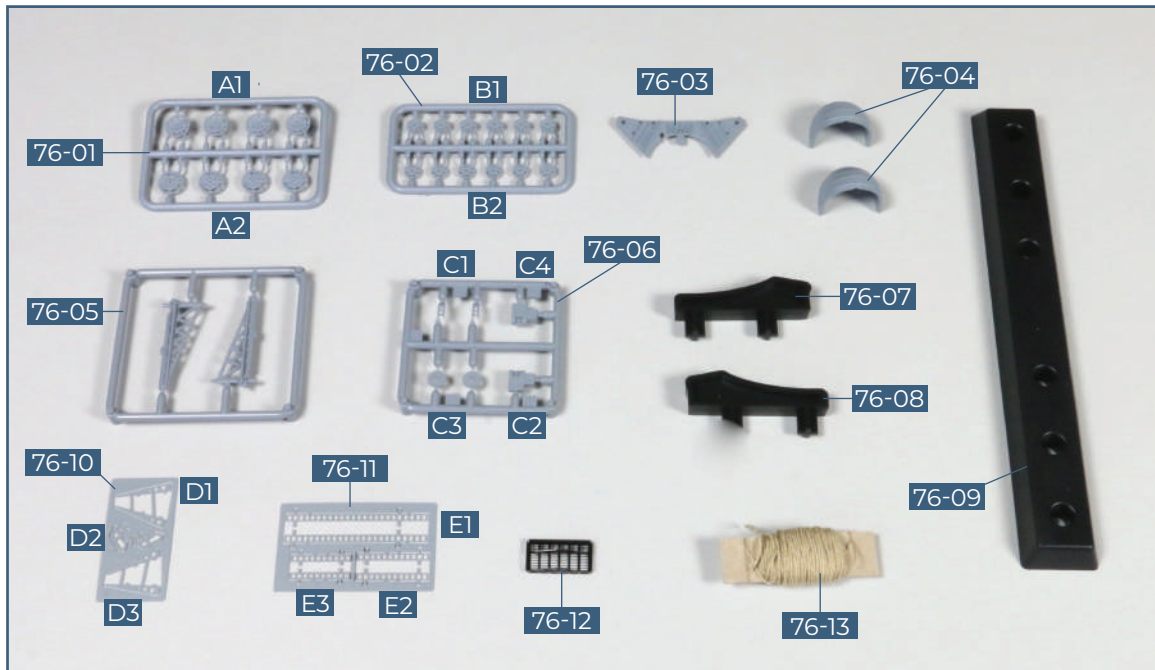


Completed work

Further details have been fitted to the forward section of the upper deck and to the barrette of the forward 38cm gun. We have also fitted another section of the hull (not shown in the image above).

STAGE 76

ROPE REELS AND FUNNEL DETAILS



COMPONENTS CHECKLIST

76-01: Large rope reels (A1, A2)

76-02: Small rope reels (B1, B2)

76-03: Crane platform

76-04: Searchlight hoods (x 2)

76-05: Crane booms (x 2)

76-06: Crane details (C1-C4)

76-07: Port hull support (L)

76-08: Starboard hull support (R)

76-09: Hull support base

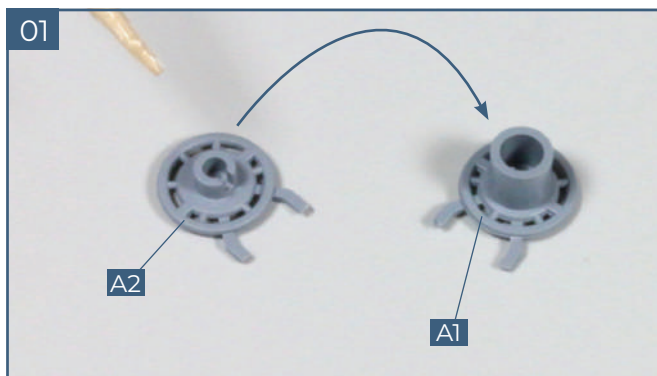
76-10: Companionway components (D1-D3)

76-11: Six ladders (E1-E3)

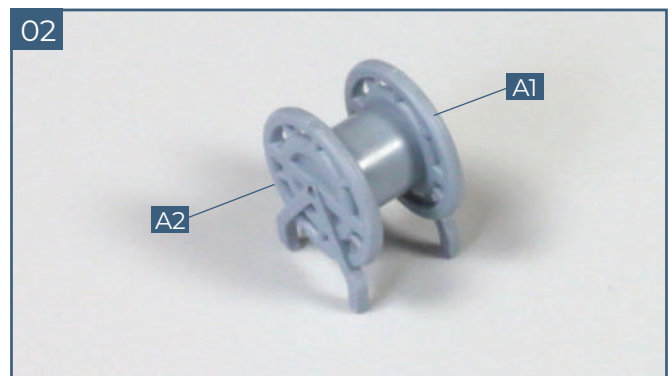
76-12: Radar antenna

76-13: Rope

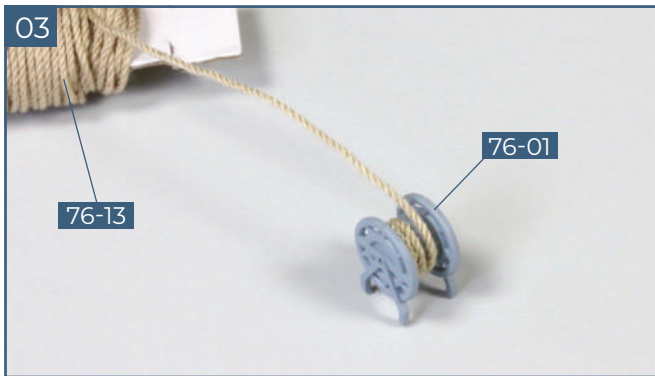
01. ASSEMBLING THE ROPE REELS



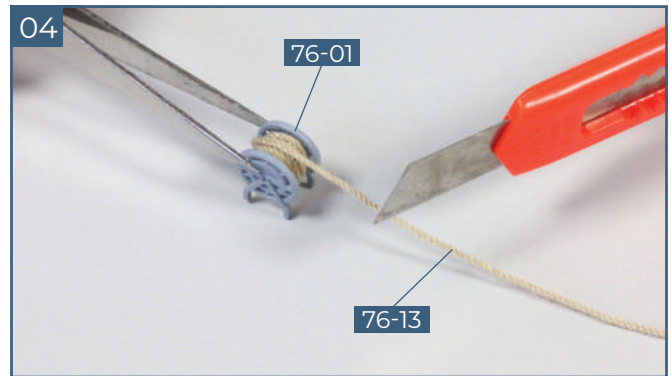
Cut the first parts **A1** and **A2** from frame **76-01**. Check how the parts fit together, ensuring that the 'legs' are aligned (see step 2). Apply a little superglue to the central rim of part **A1** and fix the parts together.



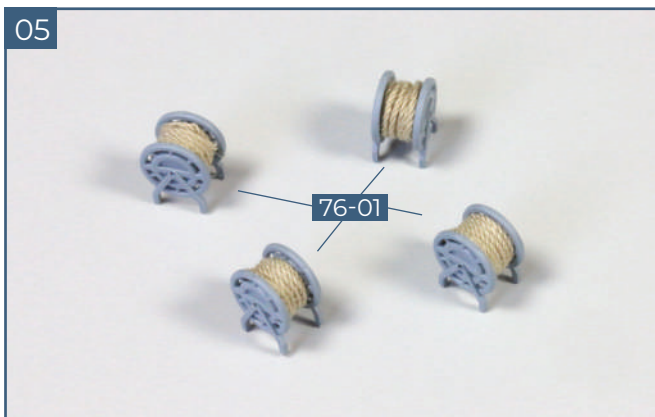
This shows the first rope reel **76-01** assembled.



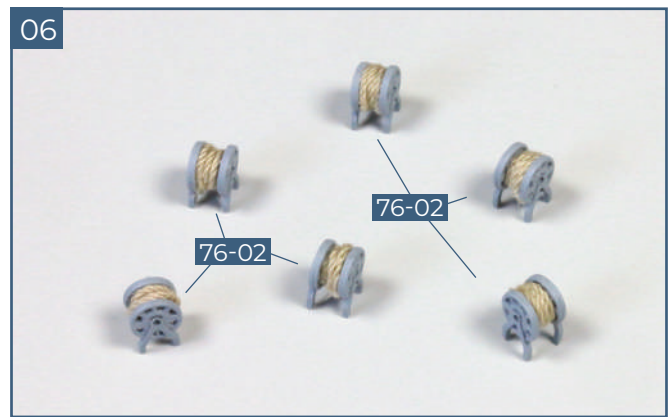
Take the rope **76-13** and use a drop of superglue to stick the end of the rope to the drum of the rope reel **76-01**. Wrap a few centimetres of rope around the drum of the rope reel.



When you have two or three even layers of rope in place cut the rope and fix the end in place with a little superglue.

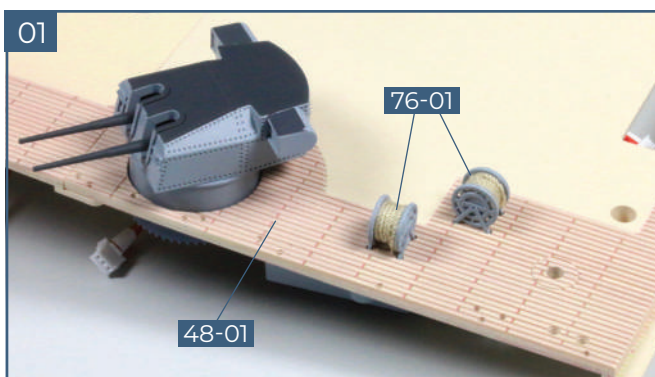


Repeat steps 1 to 4 with the remaining parts **A1** and **A2** on frame **76-01**, so that you have four rope reels.

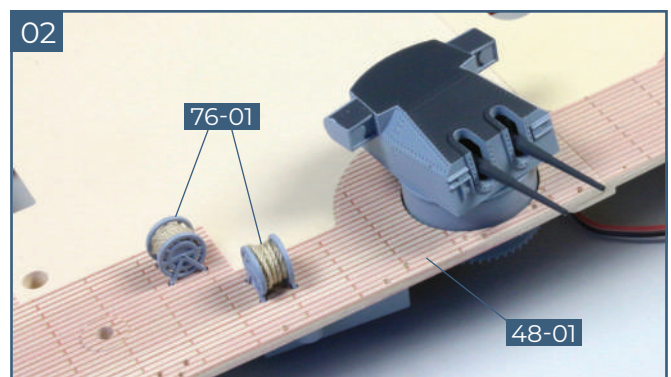


In a similar way, make six small rope drums using parts **B1** and **B2** from frame **76-02**, as shown.

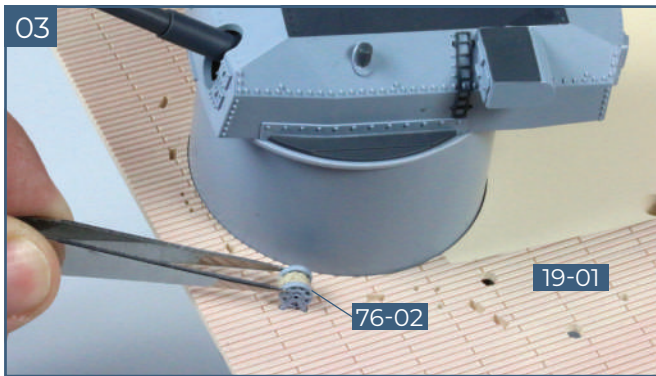
02. FITTING THE ROPE REELS



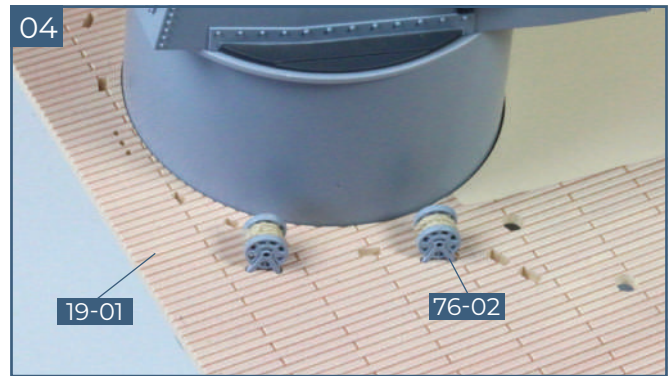
The first two large rope reels **76-01** are glued into the recesses on the port side of the upper deck section **48-01**.



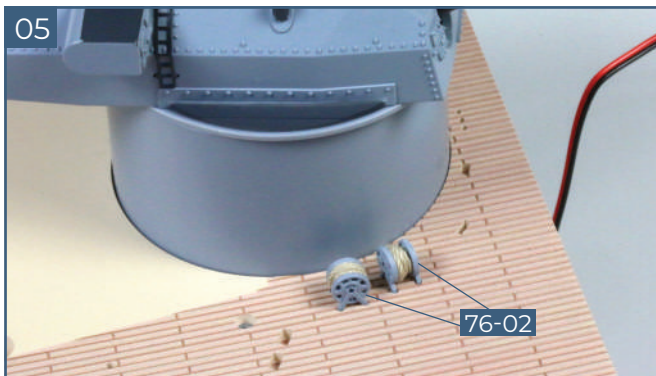
The other two large rope reels **76-01** are glued in the same place on the starboard side of the upper deck section **48-01**.



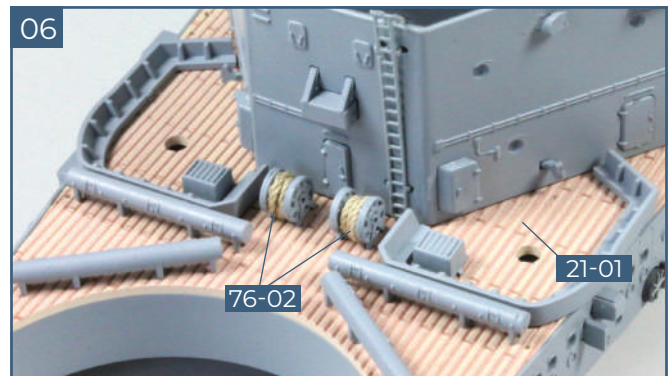
The first small rope reel **76-02** is fitted at the front of the upper deck **19-01**, on the port side of the turret Bruno. Glue in place, as shown.



The second small rope reel **76-02** is glued to the upper deck section **19-01**, close to the first rope reel.

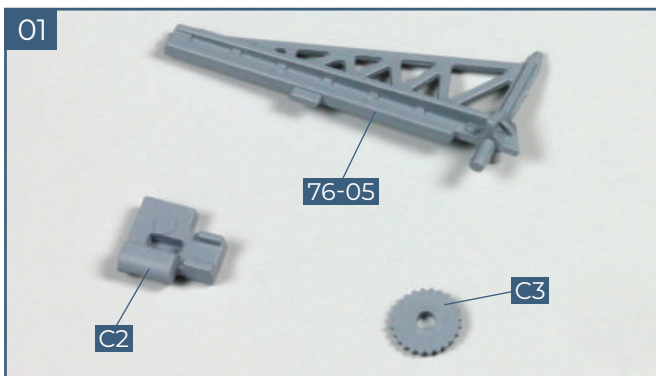


The next two small rope reels **76-02** are fitted on the other side of the turret Bruno. Note how they are positioned at right angles to each other. Fix in place with a little superglue.

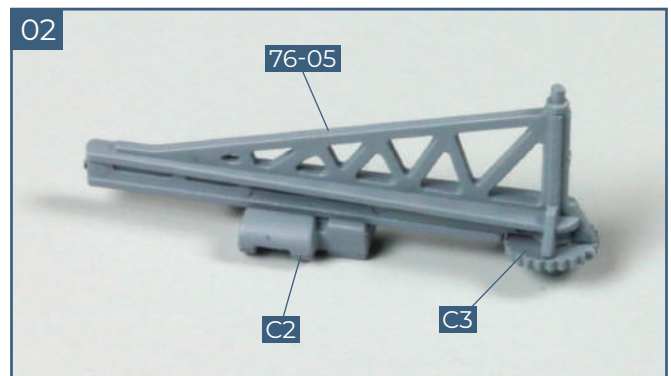


The last two small rope reels **76-02** are fixed centrally in front of the bridge on superstructure deck **21-01**. Glue in place as shown.

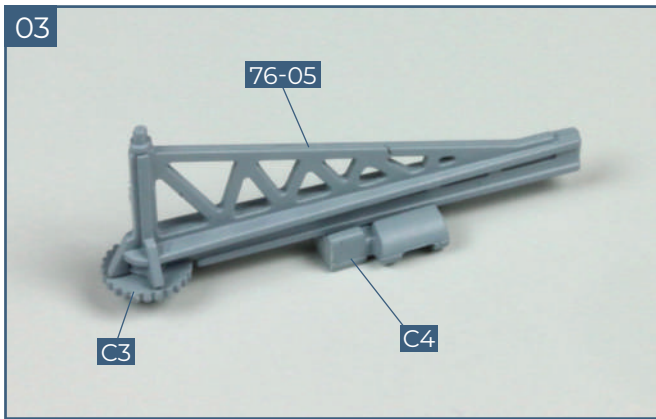
03. AIRCRAFT TRANSFER CRANES



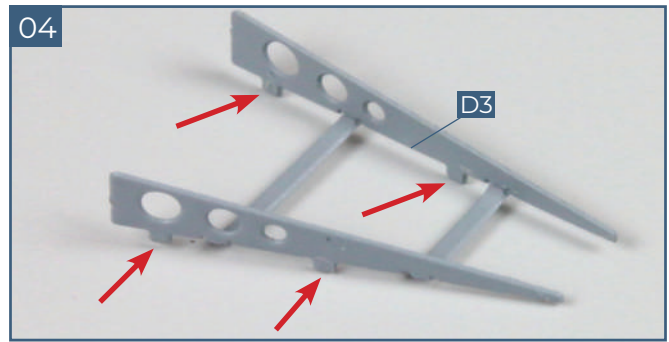
Take a crane boom **76-05** plus a trolley **C2** and hub **C3** from frame **76-06**. These parts will be used to assemble the port aircraft transfer crane. Note that parts **C2** and **C4** are mirror images of each other – make sure you have the correct one.



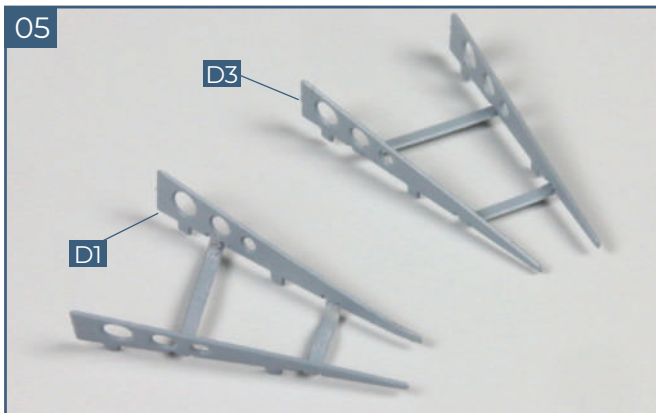
The trolley **C2** fits on to the tab on the lower edge of the crane boom **76-05**; the hub **C3** fits on to the pin at the bottom of the crane boom. Glue in place. It may help to label this as the port crane.



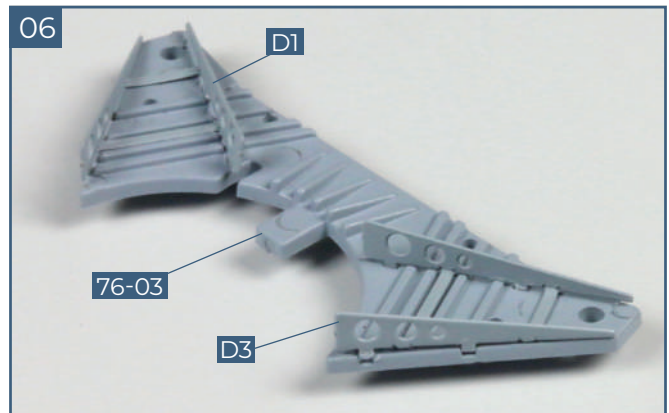
Repeat the previous step to assemble the starboard crane, using the second boom **76-05**, trolley **C4** and hub **C3**.



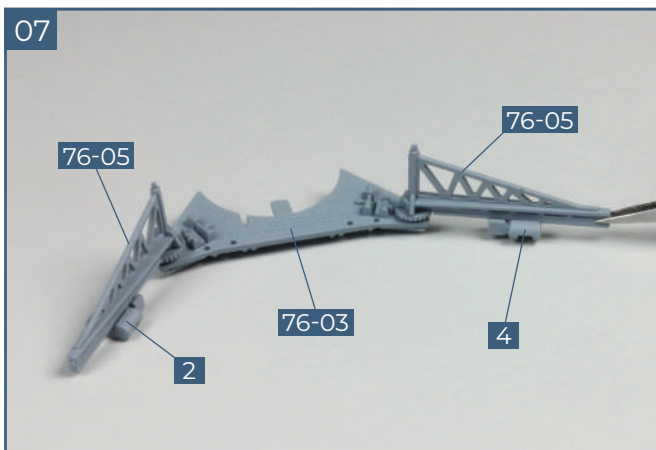
It is important to bend supports **D1** and **D3** the correct way. Study this photograph and the next step very carefully, noting the position of the tabs (arrows). Cut the supports **D1** and **D3** from frame **76-10**. Take frame **D3** (noting the positions of the tabs, see arrows) and bend the sides up at right angles as shown.



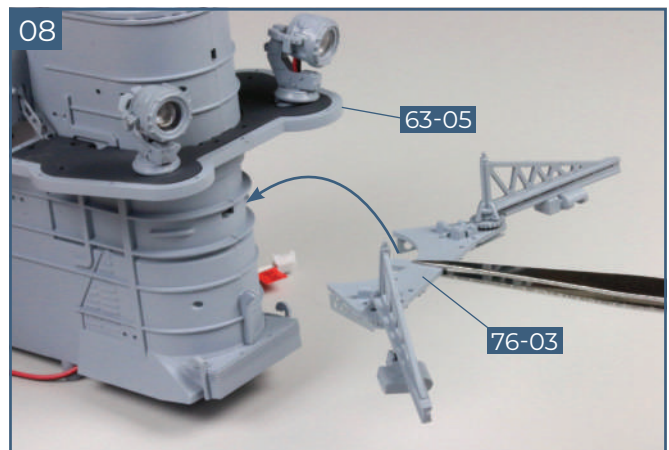
Create a mirror image of support **D3** by bending up the sides of support **D1**, as shown, noting the position of the tabs.



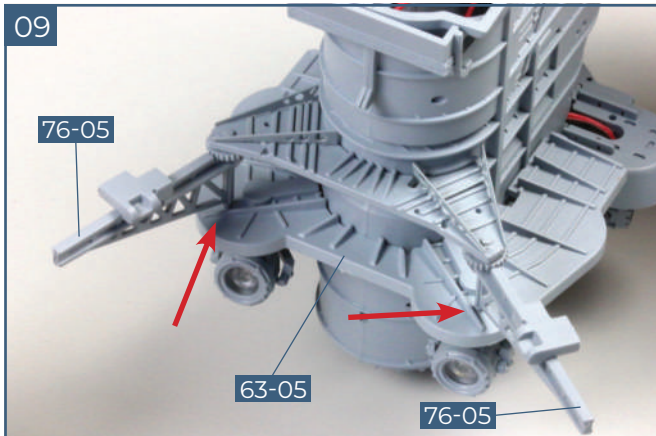
Take the crane platform **76-03** and position it upside down on your work surface. Identify the recesses for the tabs on supports **D1** and **D3**, and glue them in place.



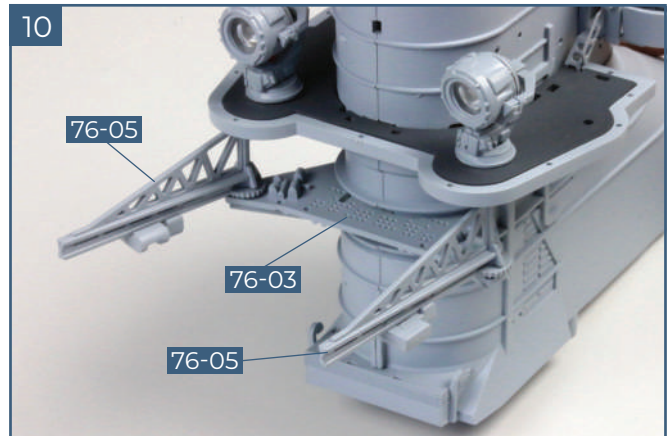
Fit the pins of the crane booms **76-05** into the upper side of platform **76-03**. Note the positions of the trolleys **C2** and **C4**. **Do not** glue in place.



Check the fit of the central tab on the platform **76-03** in the aft of the funnel. At the same time, the pins on the top of the crane booms fit into holes in the underside of the searchlight platform **63-05**.

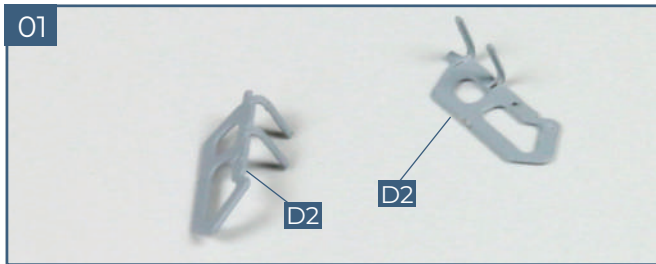


This view of the underside of the searchlight platform **63-05** shows the pins at the top of the crane booms located in the holes in the platform (see arrows).

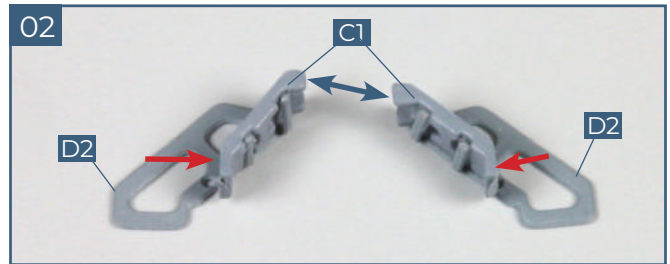


When you are happy with the fit, glue the tab on the platform **76-03** in place. The two crane booms **76-05** should be able to rotate, so they can be folded away flush with the sides of the funnel.

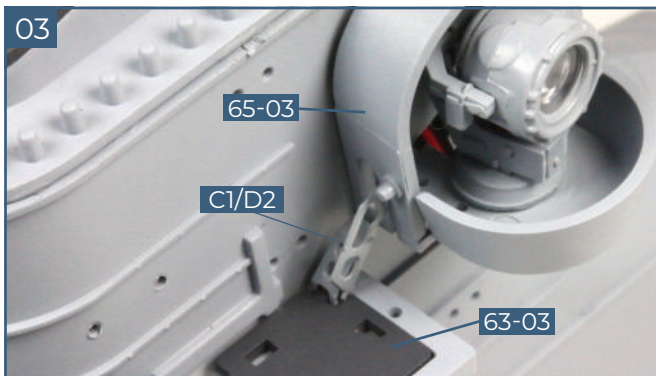
04. FITTING THE COMPANIONWAYS



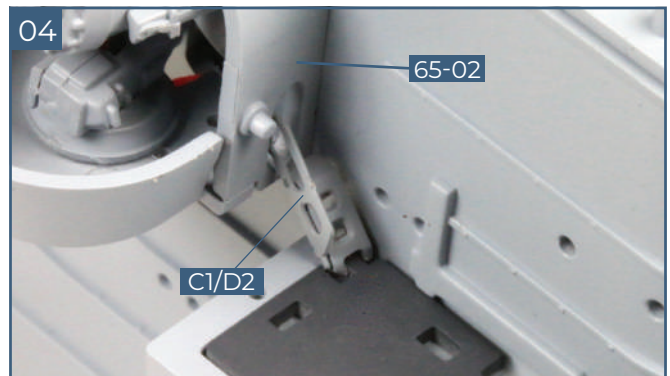
Cut the two railings **D2** from frame **76-10**. One of these will be a left-hand railing, the other will be a right-hand railing: bend the support pins in opposite directions, as shown.



Cut the two companionways **C1** from frame **76-06**. Taking care with the orientation of the companionways (note the position of the flat ledges, red arrows, and feet, blue arrows) stick them to the railings, as shown.

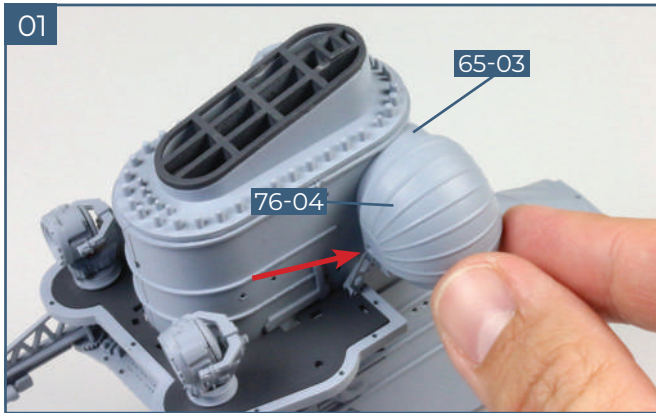


The assembled companionways fit beside the protective hoods at the side of the funnel. This shows the first companionway in place beside the starboard hood **65-03**, leading up from the deck **63-03**.

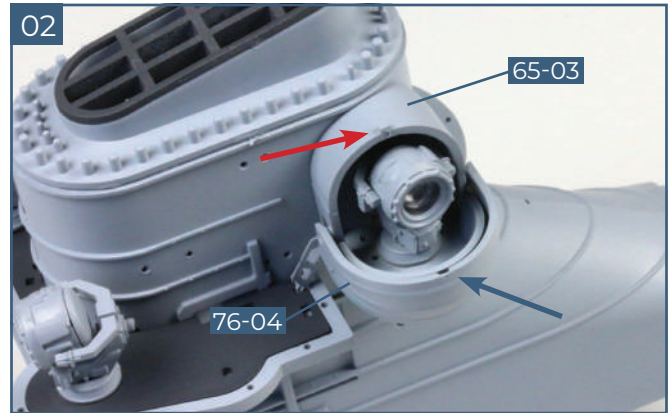


The second companionway fits on the other side of the funnel, beside the port protective hood **65-02**. When you are happy with the positions of the companionways, glue them in place.

05. SEARCHLIGHT HOODS AND LADDERS



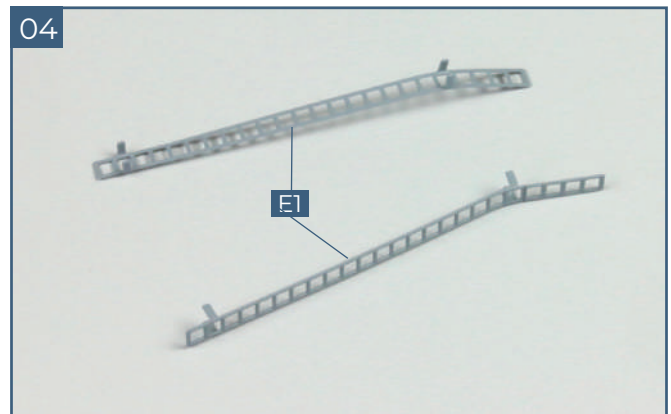
Take one of the searchlight hoods **76-04**. The hood has two holes at the hinge points (arrow), which fit over pegs on the side of the hood rim **65-03** on the starboard side of the funnel. Note the position of the notch on the hood (see step 2). This is a push-fit connection.



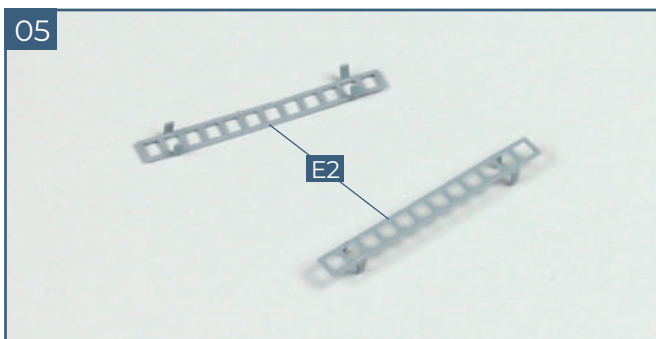
The hood **76-04** pivots on the hinge points. A small notch on the top (blue arrow) fits over a raised tab on the rim of part **65-03** (red arrow) to hold the hood closed.



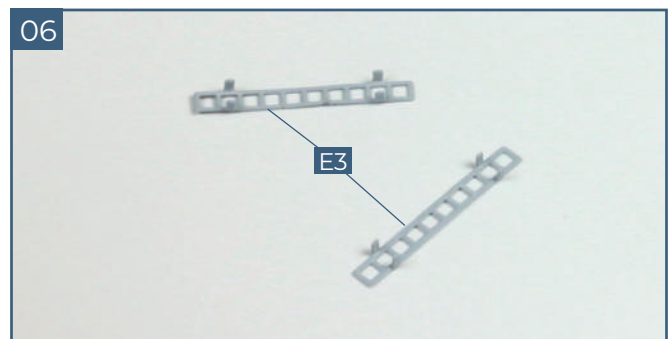
In the same way, fit the second hood **76-04** to the rim of the protective hood **65-02** on the port side of the funnel.



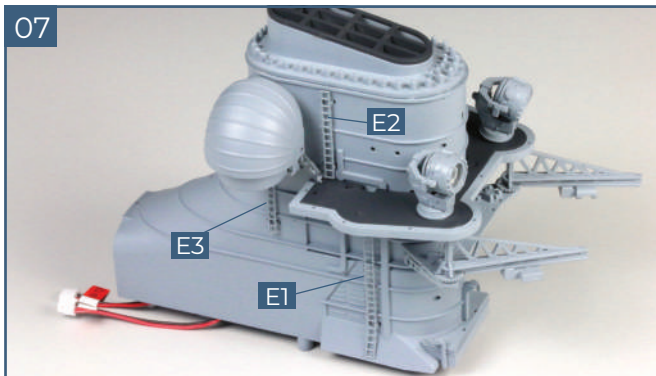
Cut the two long ladders **E1** from frame **76-11**. Bend the four pegs at right angles. Then bend the lower end of each ladder slightly outwards, as shown.



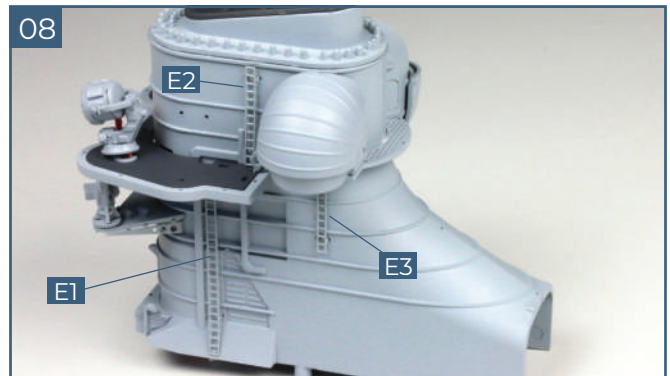
Cut the next two ladders **E2** from frame **76-11** and bend the pegs at right angles, as shown.



Finally, cut the two short ladders **E3** from frame **76-11** and bend the pegs at right angles, as shown.

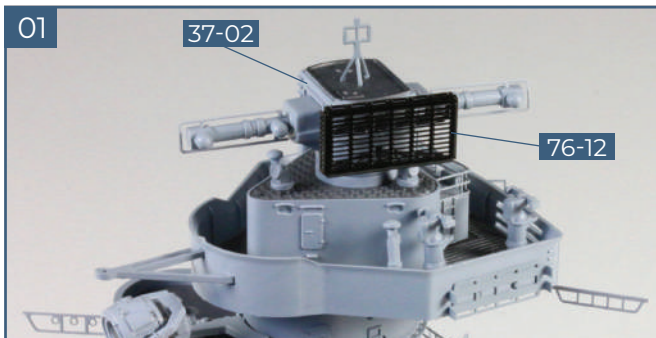


Check the fit of one set of ladders **E1**, **E2** and **E3** on the port side of the funnel, positioning them as shown, with the pegs located in corresponding holes in the funnel. Glue the pegs in place.

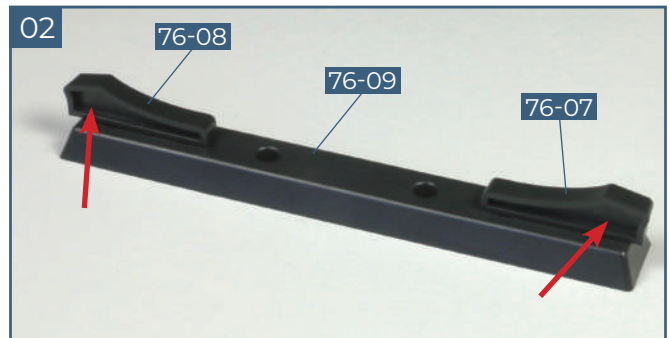


Similarly, take the second set of ladders **E1**, **E2** and **E3** and fit on the starboard side of the funnel. When you are happy with the fit, glue the pegs in place.

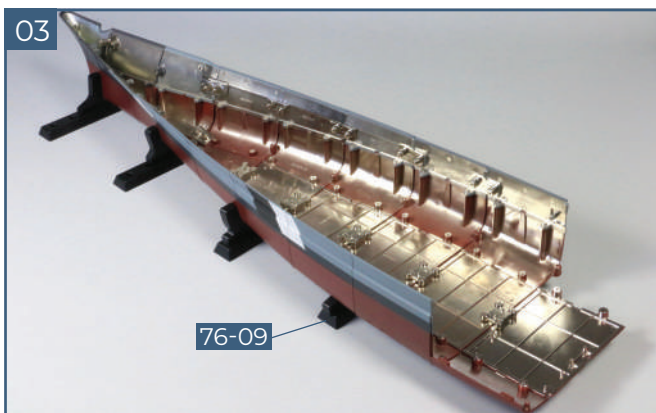
06. RADAR ANTENNA AND SUPPORT STAND



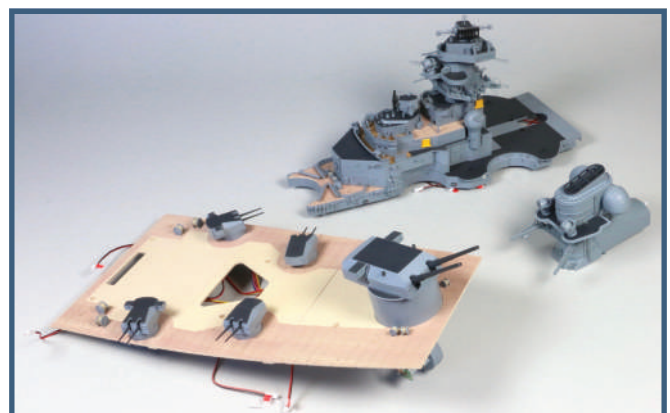
Take forward superstructure and the radar antenna **76-12**. Check the fit of part **76-12**: two tabs fit into corresponding holes on the radar unit **37-02**. Part **76-12** protrudes above part **37-02**. Glue in place.



Glue the two hull supports **76-07** and **76-08** to the hull support base **76-09**. Note that the supports are labelled "front".



You can now position the hull assembly on the four support stands that have been assembled. Make sure that the labelled sides of the hull supports are facing towards the bow of the hull assembly.

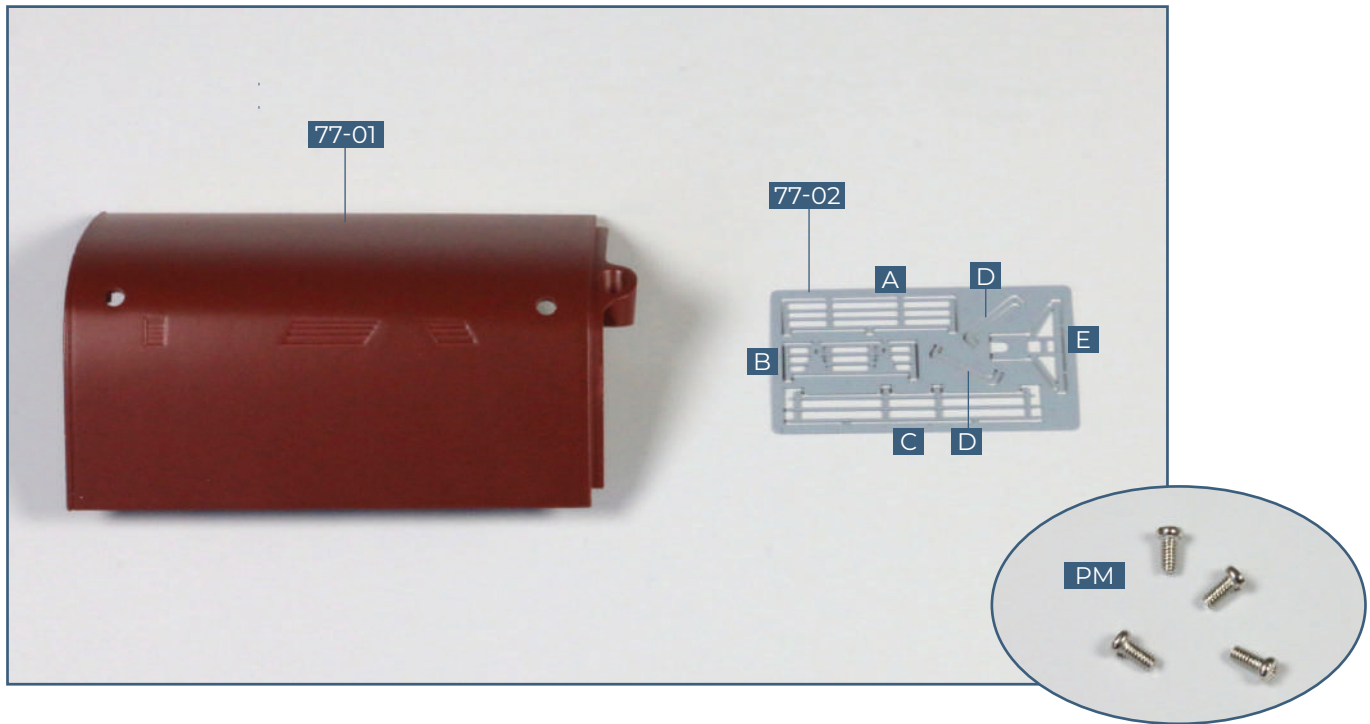


Completed work

We have continued assembly on three parts of the model: the funnel, the forward superstructure and the upper deck. We have also built a fourth support stand.

STAGE 77

HULL SECTION AND FUNNEL DETAILS



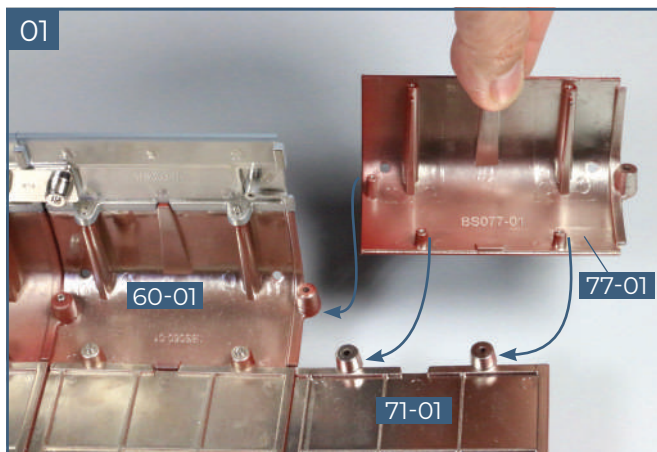
COMPONENTS CHECKLIST

77-01: Lower starboard hull section

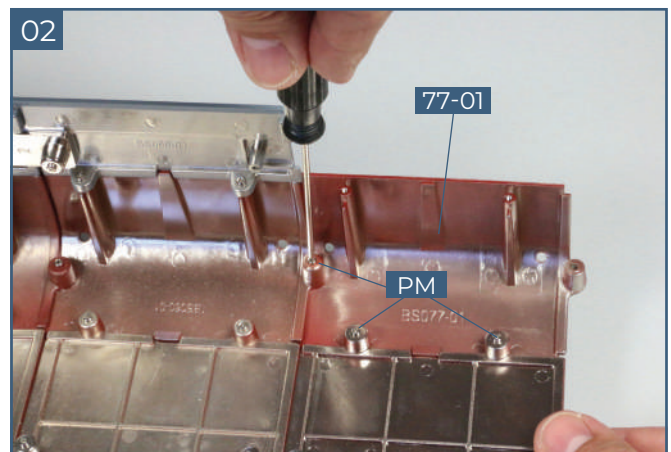
77-02: Railings and supports (A-E)

PM: Four PM 2 x 4mm screws

01. FITTING THE HULL SECTION

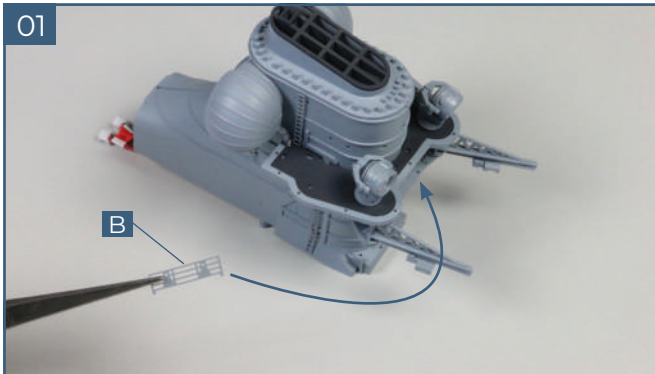


Check the fit of the next starboard hull section **77-01**: The screw sockets fit under the raised screw sockets of hull sections **71-01** and **60-01**, as indicated.

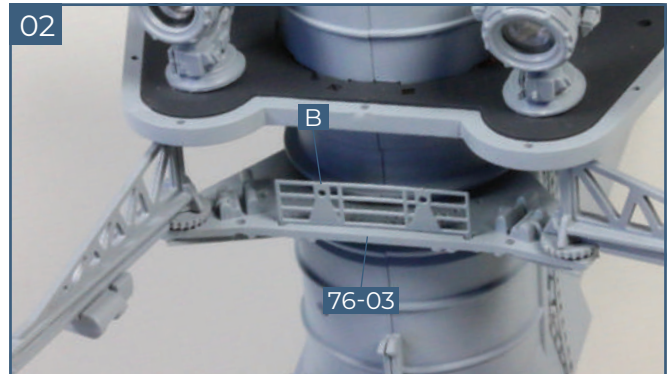


Fix in place with three **PM** 2 x 4mm screws.

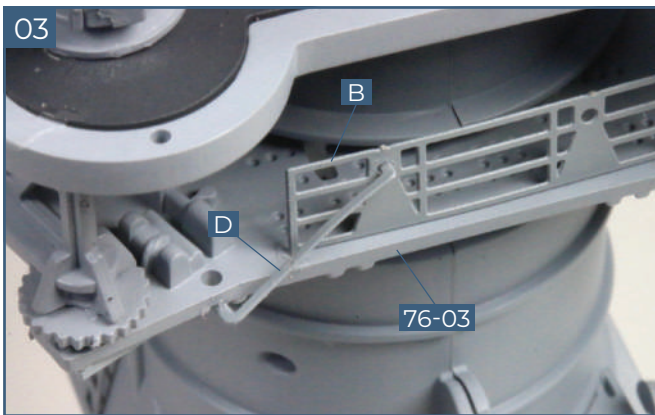
02. FITTING THE RAILINGS



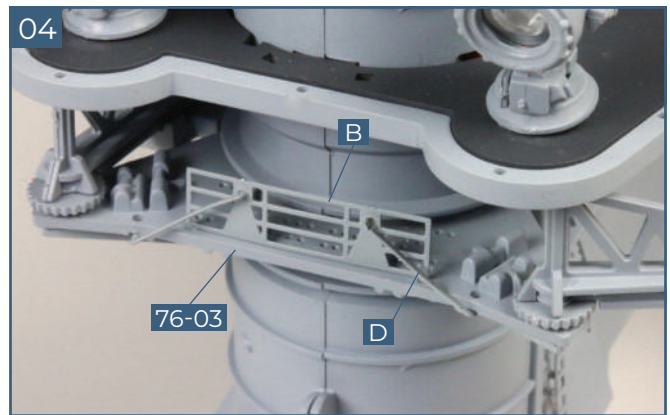
Cut railing **B** from the frame **77-02**. Take the funnel assembly from stage 76 and check the fit of the railing across the rear of the funnel.



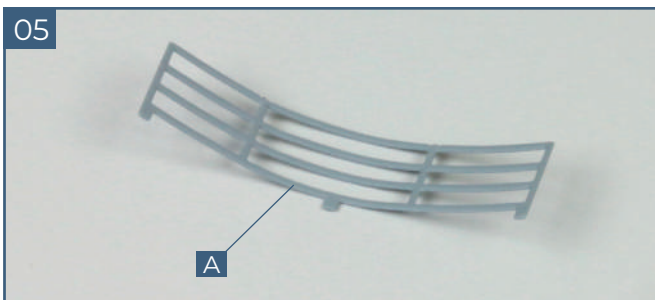
When you are happy with the fit, glue the pegs at the bottom of the railing in place on the crane platform **76-03**.



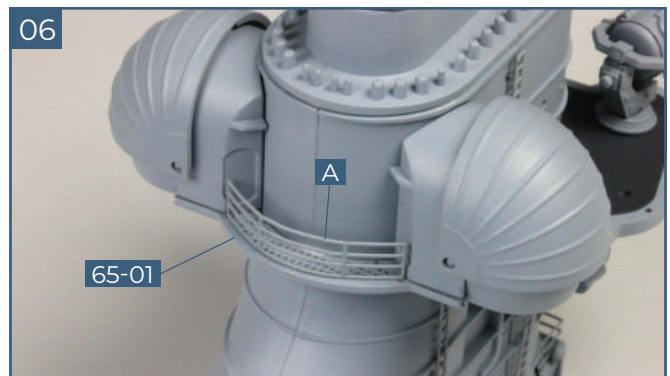
Cut the struts **D** from frame **77-02**. Fit the first one at one end of the railing **B**: the peg on one end fits into a hole in the railing, and the peg on the other end fits into a recess on the underside of the crane platform **76-03**.



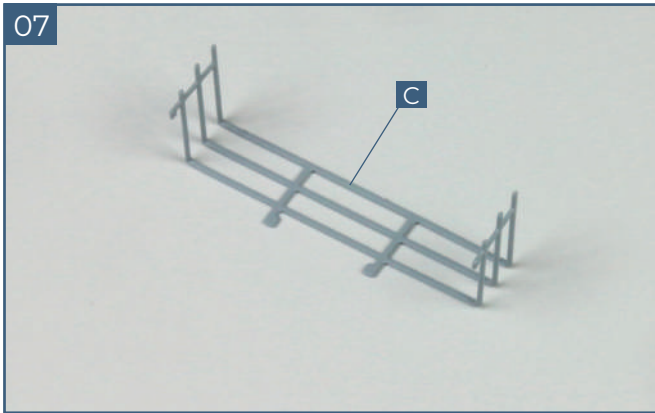
The second strut **D** fits at the other end of the railing. When you are happy with the fit, glue the struts **D** in place.



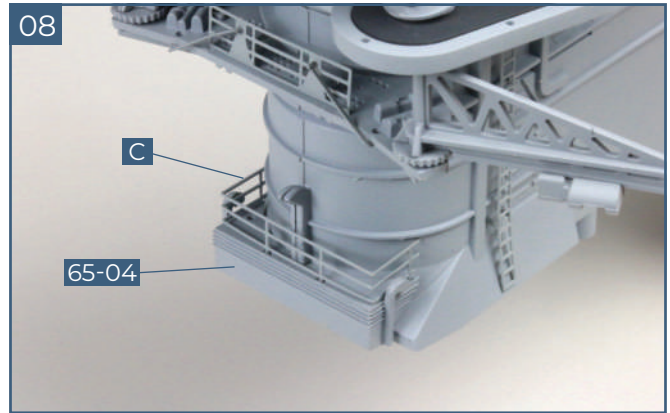
Cut railing **A** from the frame. It has to be bent in a gentle curve to match the shape of the searchlight platform **65-01** at the front of the funnel (see next step). It's advisable to find a cylindrical object of a similar diameter to bend it around.



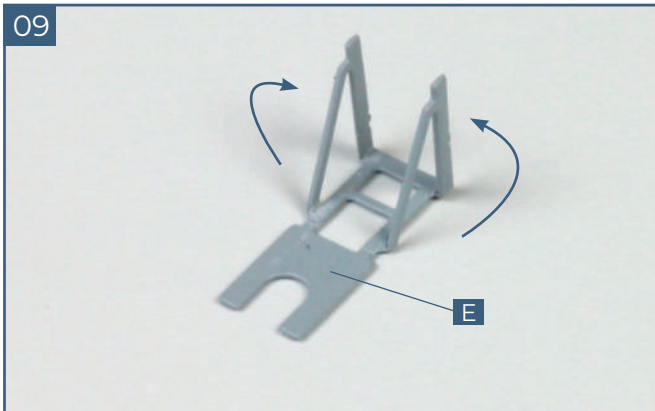
Apply a little superglue to the three pegs on the bottom of railing **A** and fix the railing in place.



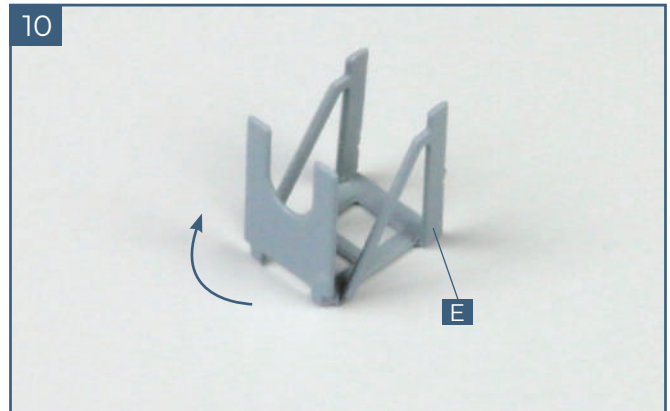
07 Cut railing **C** from frame **77-02** and bend the two ends at right angles, as shown.



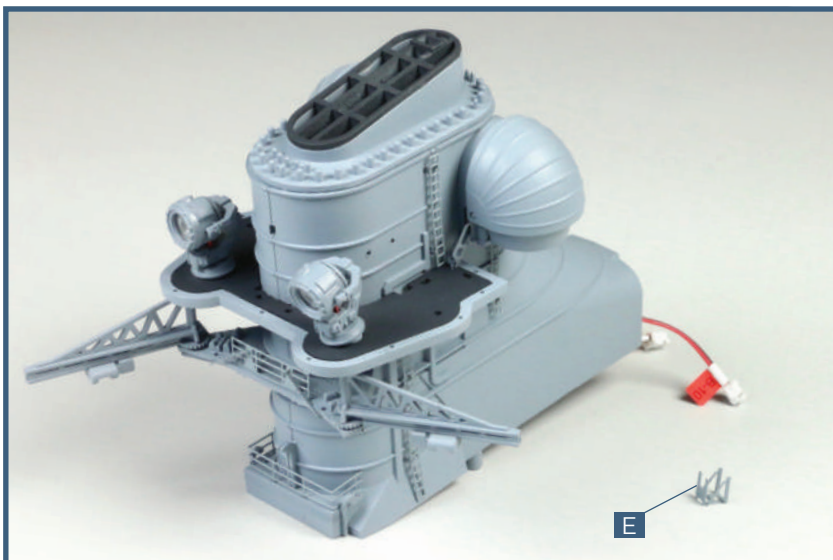
08 The railing fits at the rear of the funnel assembly: four pegs on the railing fit into holes in the funnel extension **65-04**. When you are happy with the fit, glue in place.



09 Cut the railing and platform **E** from frame **77-02**. Identify the fold lines on the part. Bend the two sides upwards at right angles, as shown.



10 Fold the platform upwards, as shown.

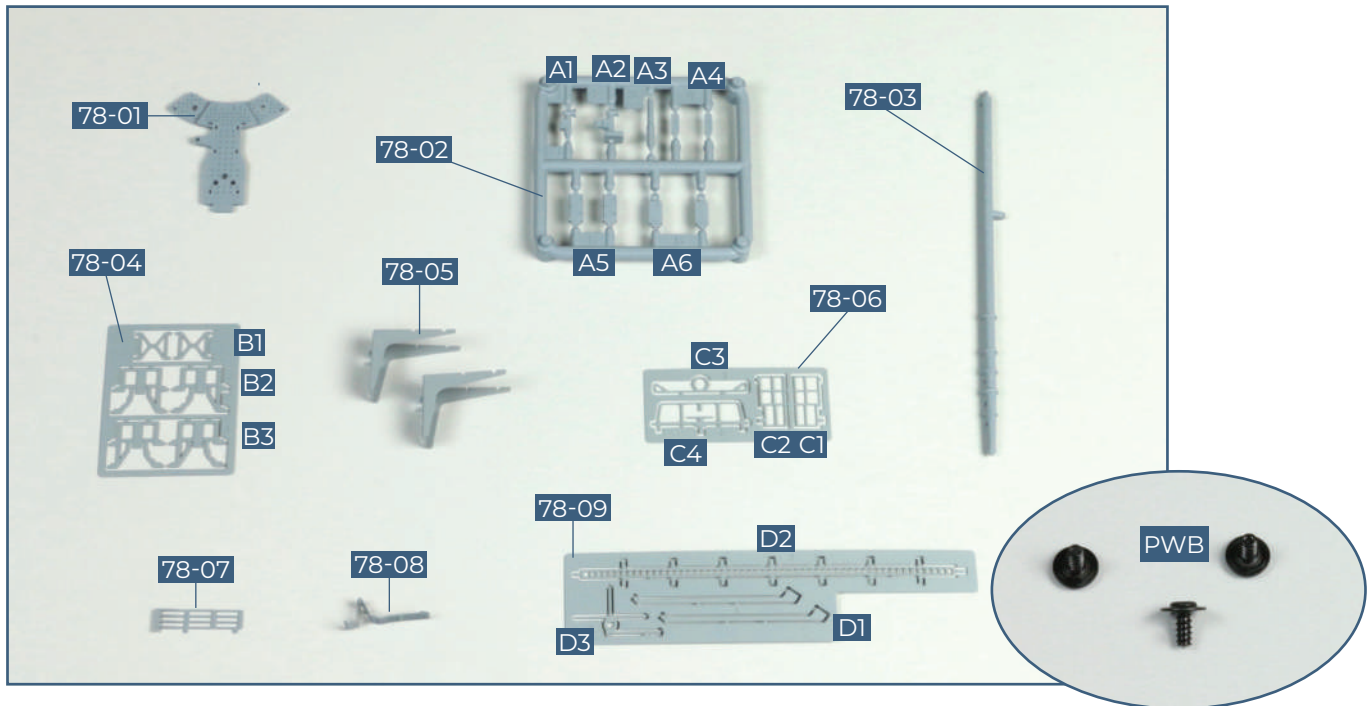


Completed work

Another section has been added to the hull (not shown here). Railings and supports have been fitted to the funnel assembly. The railing and platform will be fitted in a future stage. Store the parts carefully until they are needed.

STAGE 78

FINAL DETAILS FOR THE FUNNEL



COMPONENTS CHECKLIST

78-01: Foremast base

78-02: Lockers and steam whistle (A1 – A6)

78-03: Foremast

78-04: Supports (B1 – B3)

78-05: Searchlight bracket (x2)

78-06: Railings and mast details (C1 – C4)

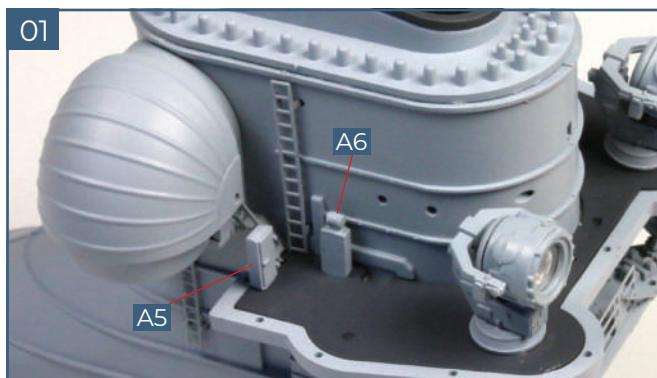
78-07: Railing

78-08: Railing

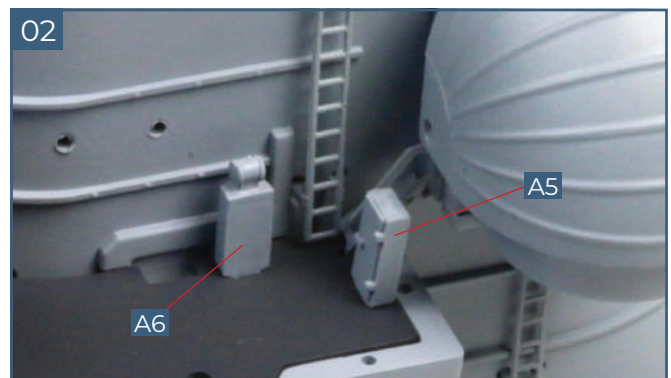
78-09: Ladder, mast top and supports (D1 – D3)

PWB: Three 2 x 4mm flange screws

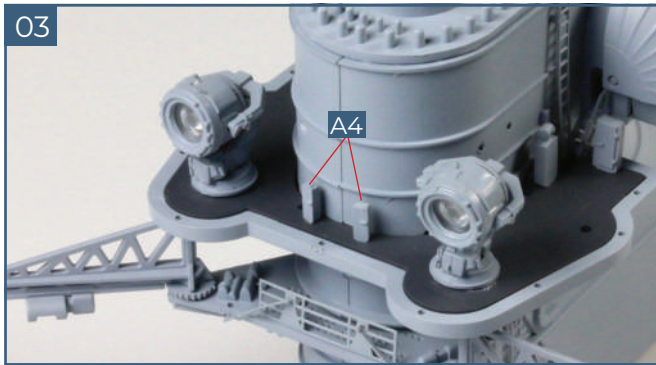
01. DETAILS FOR THE FUNNEL



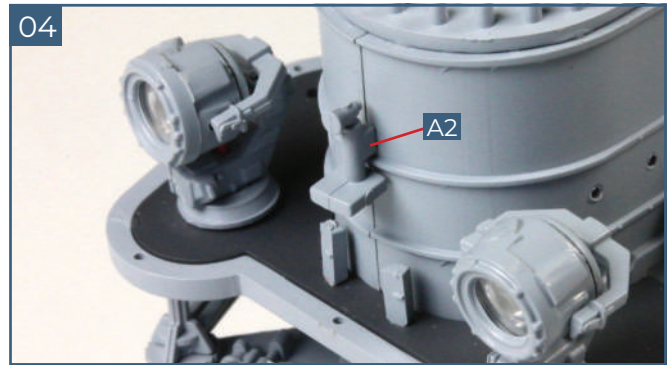
Cut the lockers **A5** and **A6** from frame **78-02**. Fit one of each type of locker to the searchlight platform on the port side of the funnel. Pegs on the bases of the lockers fit into corresponding recesses in the deck. Glue in place.



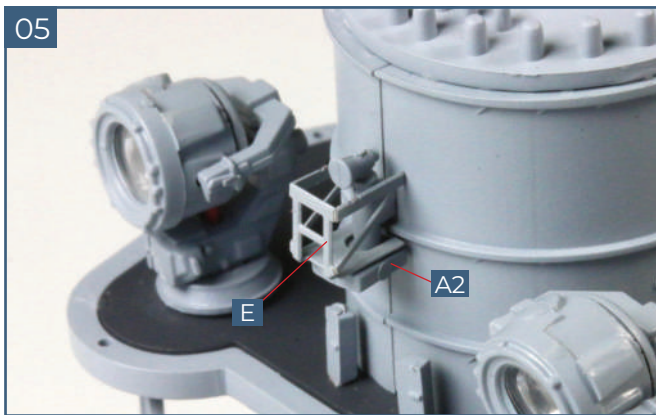
Similarly, glue a locker **A5** and a locker **A6** in place on the starboard side of the funnel, as shown.



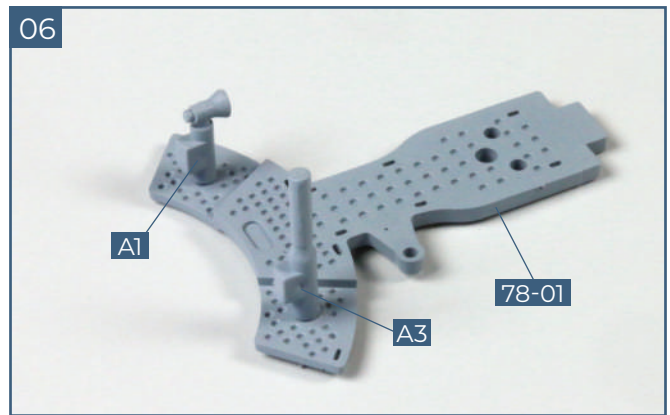
03 Cut two lockers **A4** from frame **78-02**. These fit on the searchlight platform behind the funnel, as shown. Glue in place.



04 Cut the steam whistle **A2** from frame **78-02**. Check the fit at the rear of the funnel: a peg on the base of the whistle fits into a slot in the funnel. Glue in place.

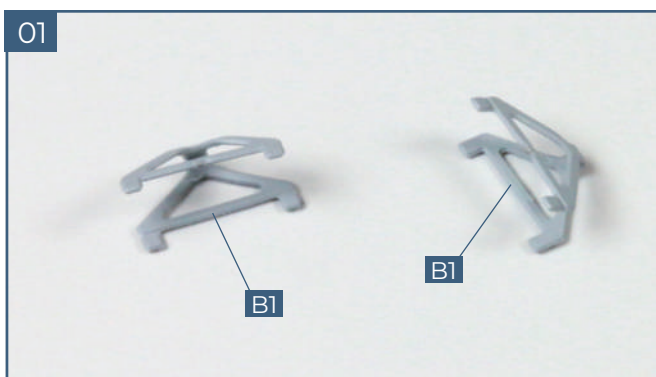


05 Take the railing and platform, part E (from frame **77-02**), which was shaped in the previous stage's instructions. Fit the platform of part E around the base of the steam whistle **A2**. Glue in place.

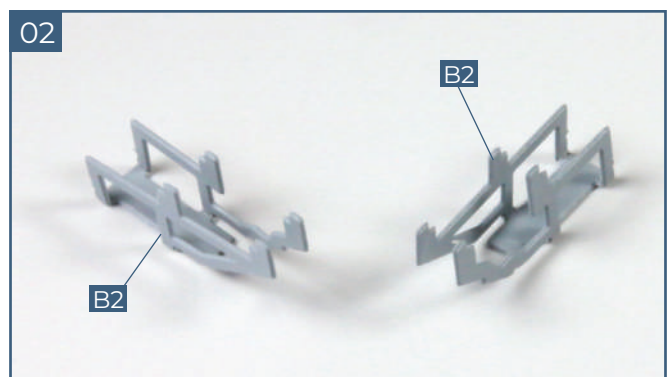


06 The remaining two parts from frame **78-02**, parts **A1** and **A3**, fit on the foremast platform **78-01**. Glue in place as shown.

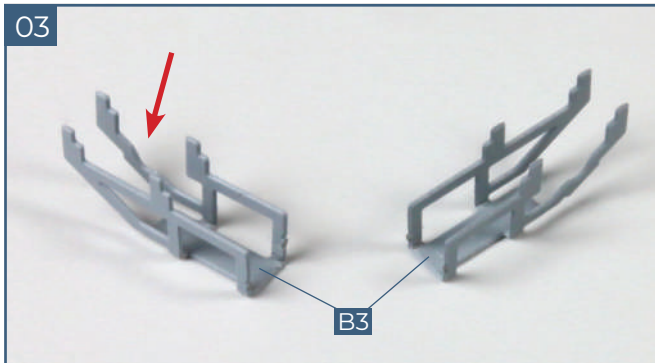
02. METAL PARTS FOR THE FUNNEL



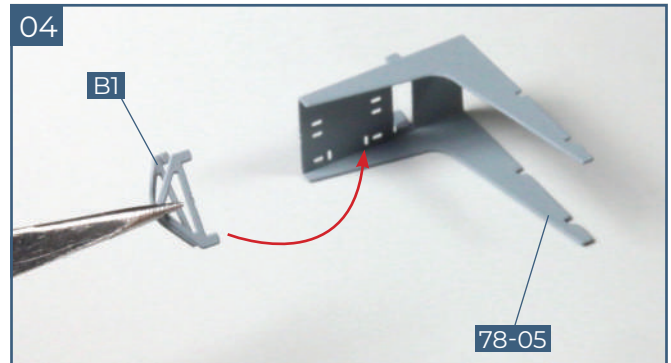
01 Cut the two supports **B1** from frame **78-04** and bend them to form pyramid shapes, as shown (see also steps 4 and 5, opposite).



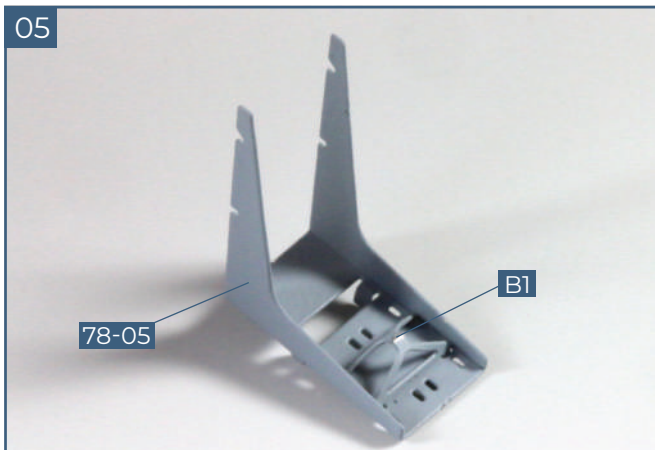
02 Cut the two supports **B2** from frame **78-04**. Study the photograph carefully, noting where the sides of the parts differ. Bend both sides up at right angles, to create two identical supports.



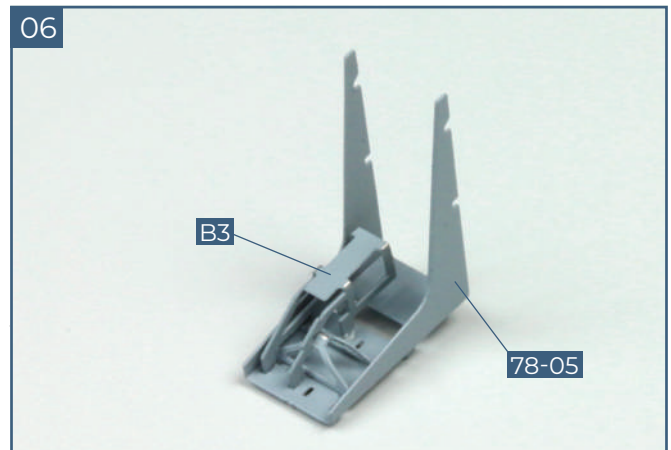
Cut the two supports **B3** from the frame **78-04** and note how the sides are bent the opposite way to supports **B2**. Bend both sides up at right angles. **NOTE:** Parts **B2** and **B3** are mirror images of each other; the arrow indicates where the parts differ.



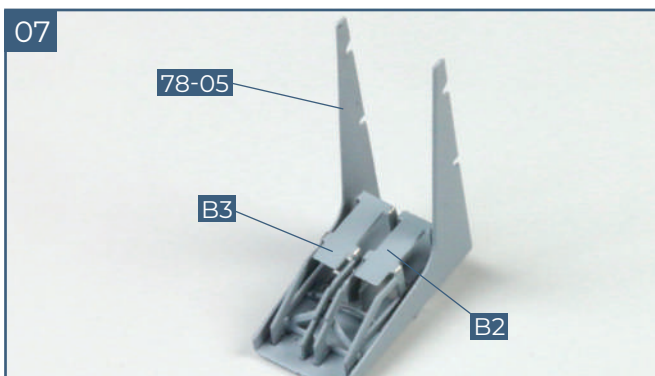
Take a searchlight bracket **78-05** and a support **B1** from step 1. Check the fit across the inside of the bracket **78-05**. The tabs on part **B1** fit into slots in part **78-05**.



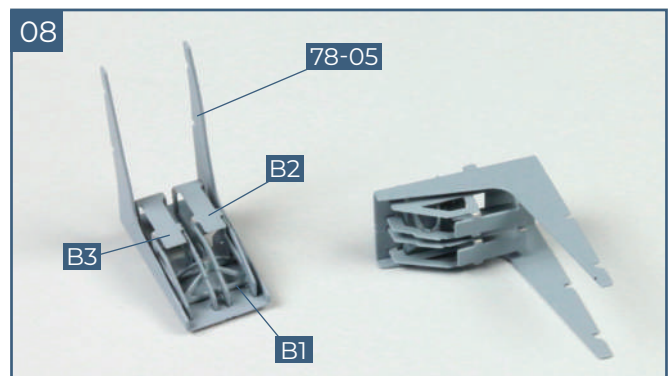
The tabs at the corners of the pyramid shape **B1** should protrude through the searchlight bracket **78-05**. Glue the tabs in place.



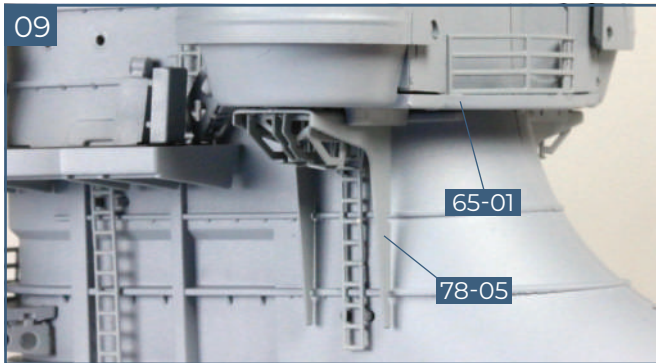
Take a support **B3** and fit it over one side of the support **B1**, on the underside of the searchlight bracket **78-05**. Glue in place.



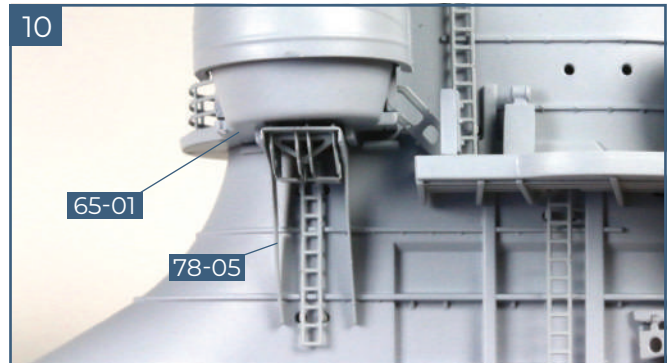
The first support **B2** fits over the other side of the support **B1**. Glue in place.



Repeat the previous three steps to fit the remaining parts **B1**, **B2** and **B3** to the underside of the second searchlight bracket **78-05**.

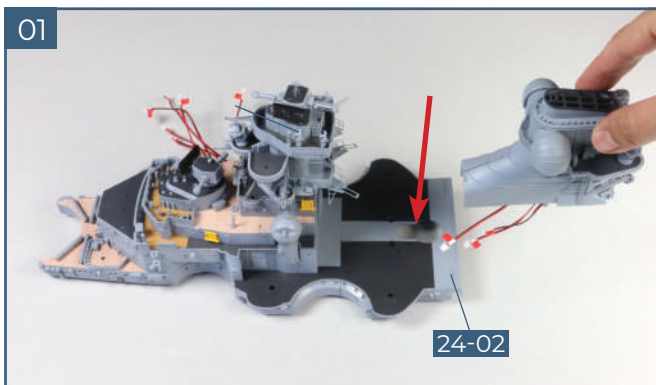


Check the fit of the first bracket **78-05** on the starboard side of the funnel, beneath the searchlight platform **65-01**. When you are happy with the fit, glue in place.

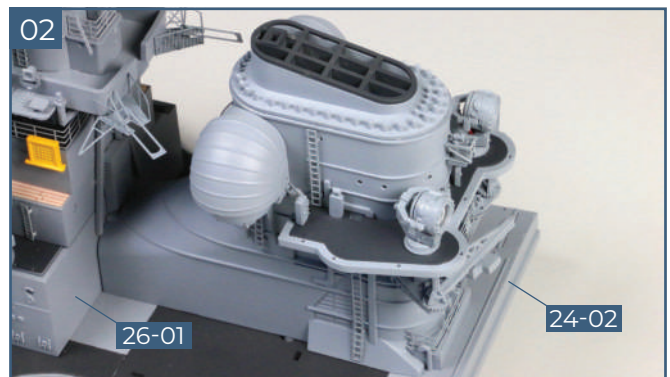


The second searchlight bracket **78-05** is glued to the port side of the funnel beneath the searchlight platform **65-01** as shown.

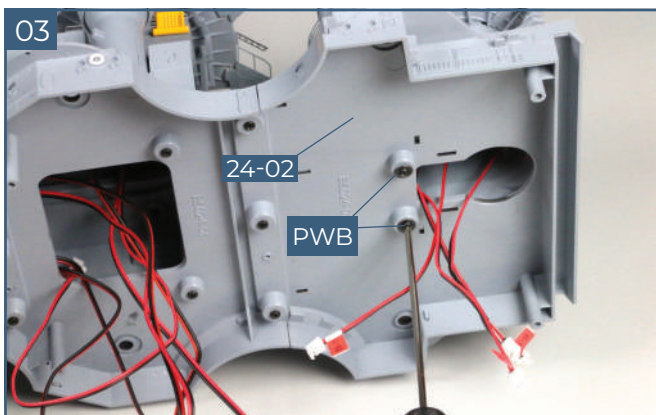
03. FINAL FUNNEL ASSEMBLY AND FOREMAST



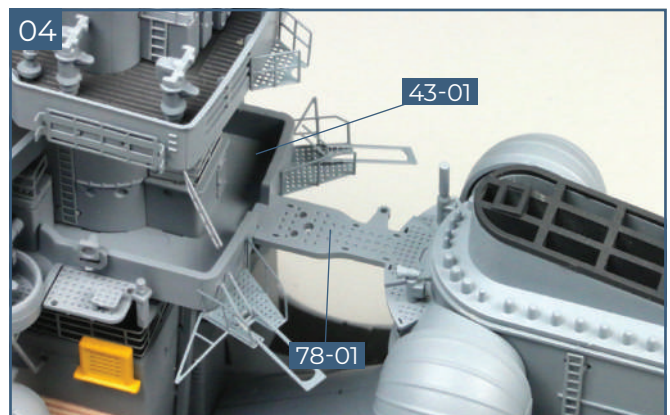
Place the forward superstructure assembly on your worktop. Take the funnel and thread its three cables through the opening in superstructure deck **24-02**, indicated by the red arrow.



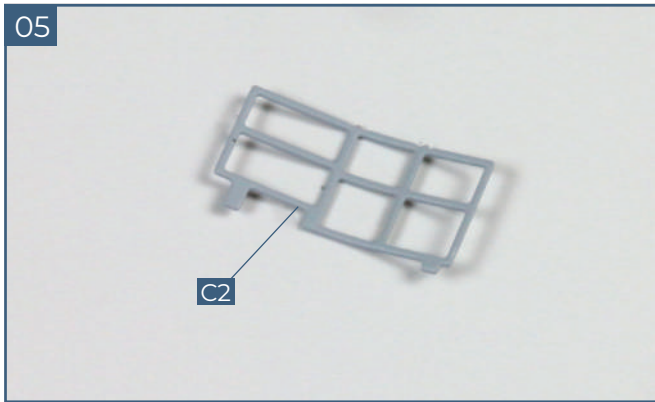
Fit the funnel onto the forward superstructure so that it butts up against the bridge deck **26-01**.



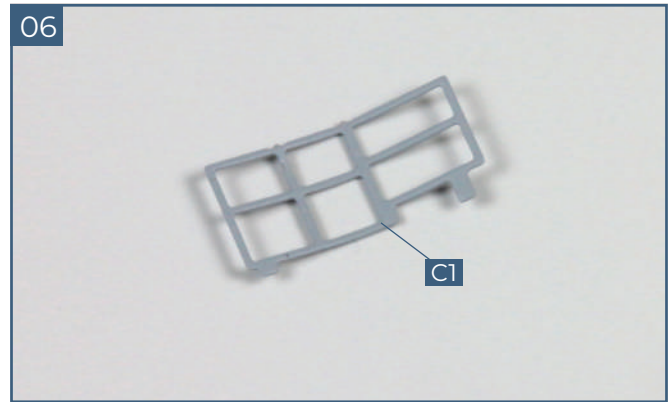
Holding the funnel assembly in place, carefully turn the work so that you can access the underside of the superstructure deck **24-02**. Use two **PWB** 2 x 4mm flange screws to fix the funnel in place, as shown.



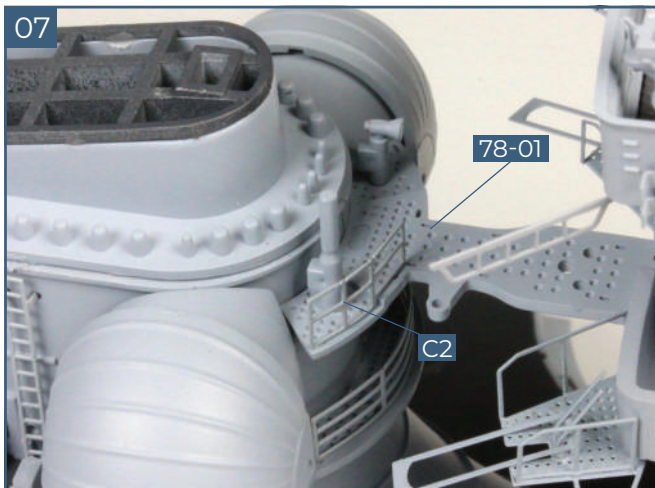
Fit the foremast base **78-01** between the forward superstructure (level with the admiral's deck, **43-01**) and the funnel, as shown. Glue the ends of the foremast base in place.



The railing **C2** from frame **78-06** has to be bent to fit around the curve at the edge of the foremast base **78-01** (see also step 7, below).



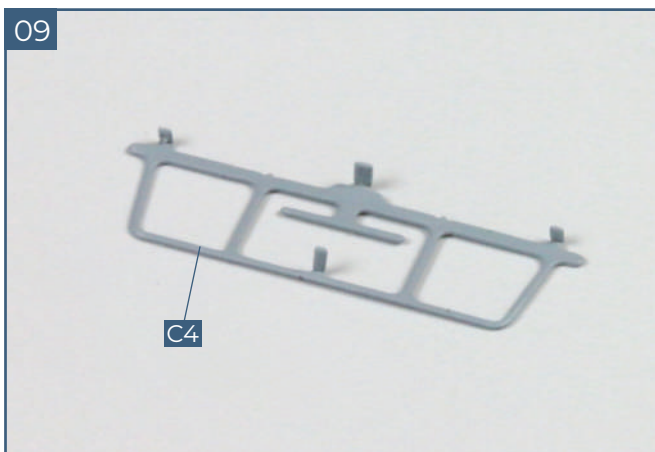
The railing **C1** from frame **78-06** has to be bent to fit around the curve on the other side of the foremast base **78-01** (see also step 8, below).



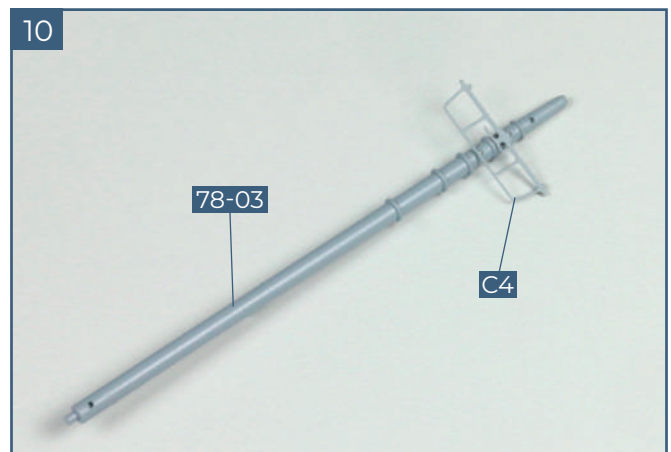
Glue the railing **C2** in place on the starboard side of the foremast base **78-01**.



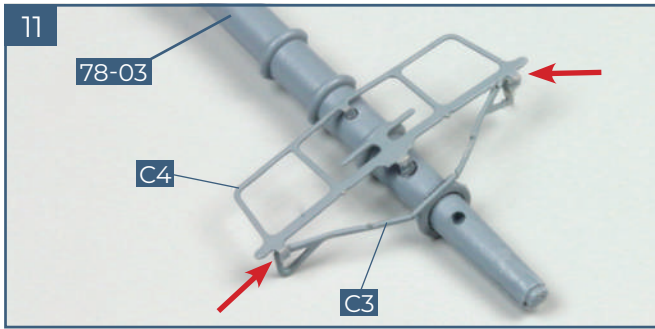
Glue the railing **C1** in place on the port side of the foremast base **78-01**.



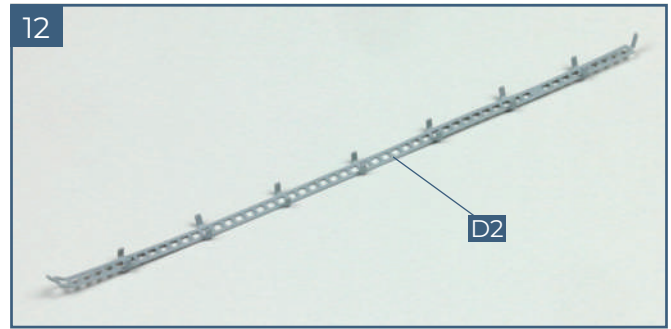
Cut the rigging spar **C4** from frame **78-06**. Identify the four tabs and bend them at right angles as shown.



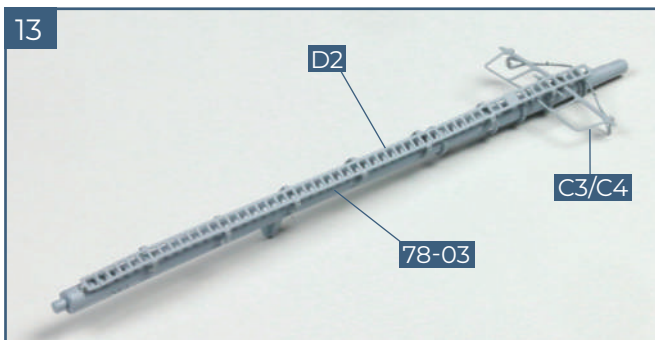
Take the foremast **78-03**. Check the fit of the two central tabs on the spar **C4** near the top of the mast. The tabs fit into the lower two of the three holes. Glue in place.



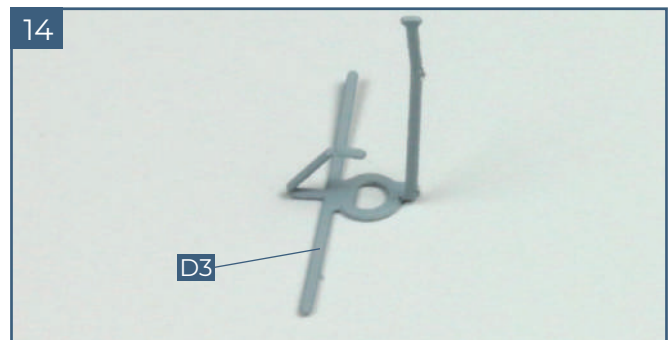
Cut part **C3** from frame **78-06**. Bend it to shape as you fit it in place: the loop in part **C3** fits over the top of the mast **78-03**, then the arms are bent down to the sides, as shown, so that the ends of the arms fit beneath the tabs at the ends of the arms of part **C4** (arrows).



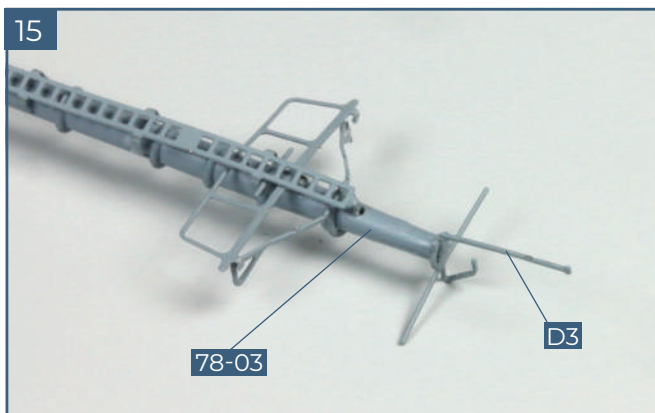
Cut the ladder **D2** from frame **78-09**. Identify the seven pairs of pegs down the sides of the ladder and the pegs at each end. Bend them at right angles, as shown.



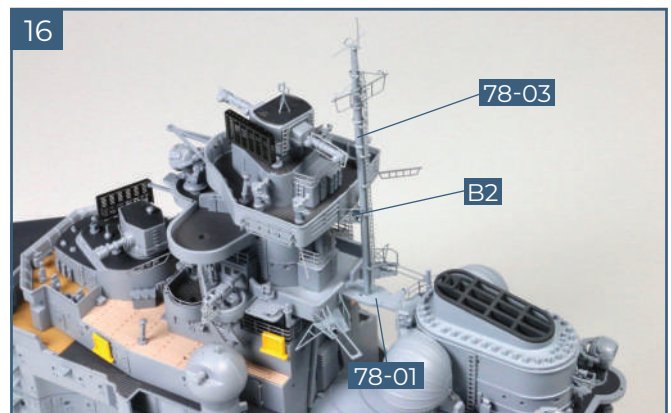
Fit the ladder up the back of the foremast: the peg at the base of the ladder fits into a hole near the base of the mast; the pairs of pegs on the sides of the ladder wrap round the sides of the mast and the diagonal pegs at the top of the ladder fit into a hole in the mast above the assembly **C3/C4**. Glue in place.



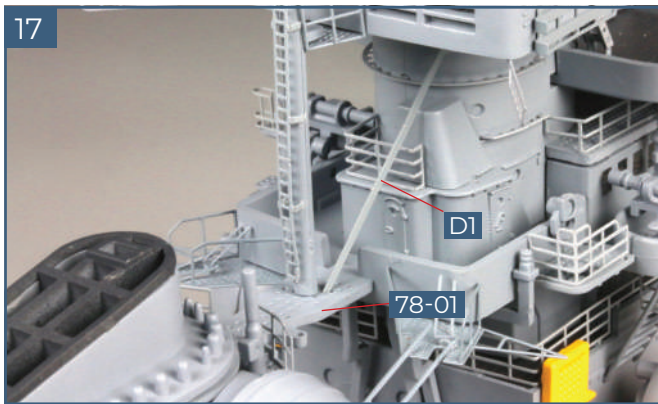
Cut the antenna **D3** from frame **78-09**. Study the photograph carefully, and bend the part to make the shape shown. One spar is bent upwards at right angles (right, above); the other is bent twice along the fold lines.



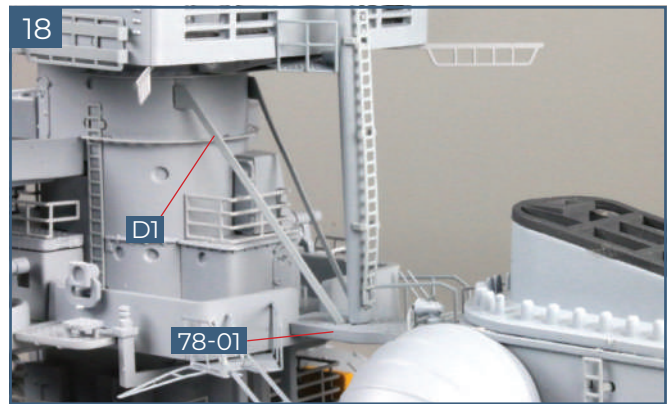
Fit the antenna **D3** over the top of the mast as shown, ensuring that you have it facing the right way. Glue in place.



Fit the base of the mast into the central hole in the base plate **78-01**. The mast also fits into the recess in the mast support platform **B2** from frame **57-06**. Note that the ladder is on the side of the mast facing away from the forward superstructure. When you are happy with the fit, glue it in place.



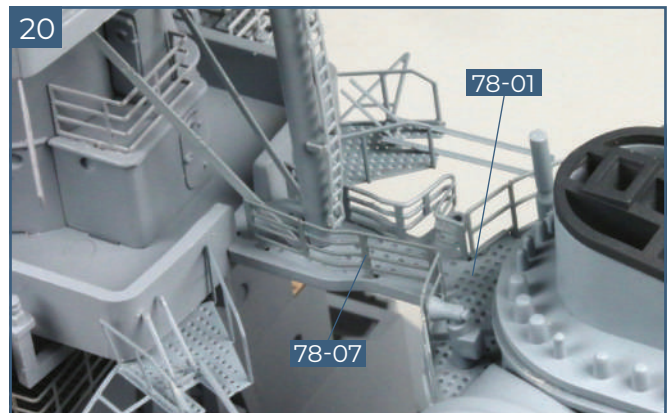
Cut the first of the two long struts **D1** from frame **78-09**. The small peg at the base fits into a hole in the foremast base **78-01**; the wider tab at the top fits into a vertical recess on the rear of the superstructure (see also next step).



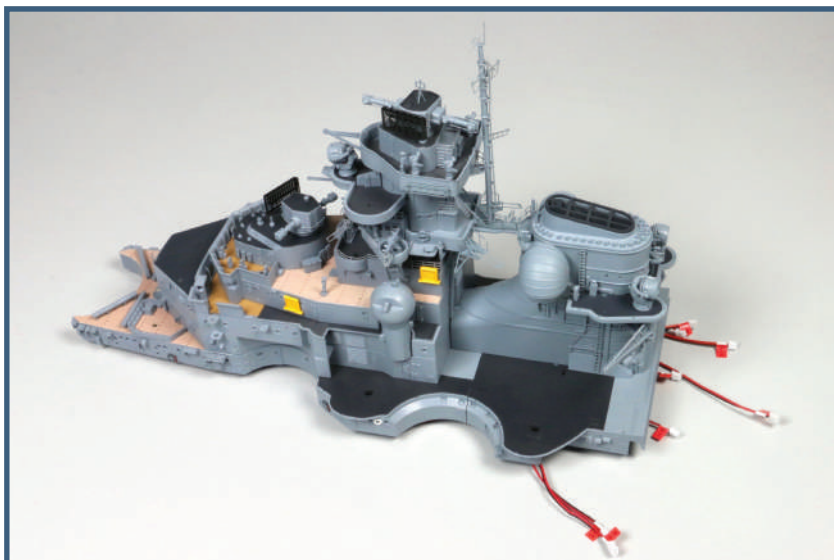
The second long strut **D1** fits in the same way from the foremast base **78-01** to the rear of the superstructure. Glue the two struts in place.



Fit railing **78-08** along the starboard side of the foremast base **78-01**. When you are happy with the fit, glue in place.



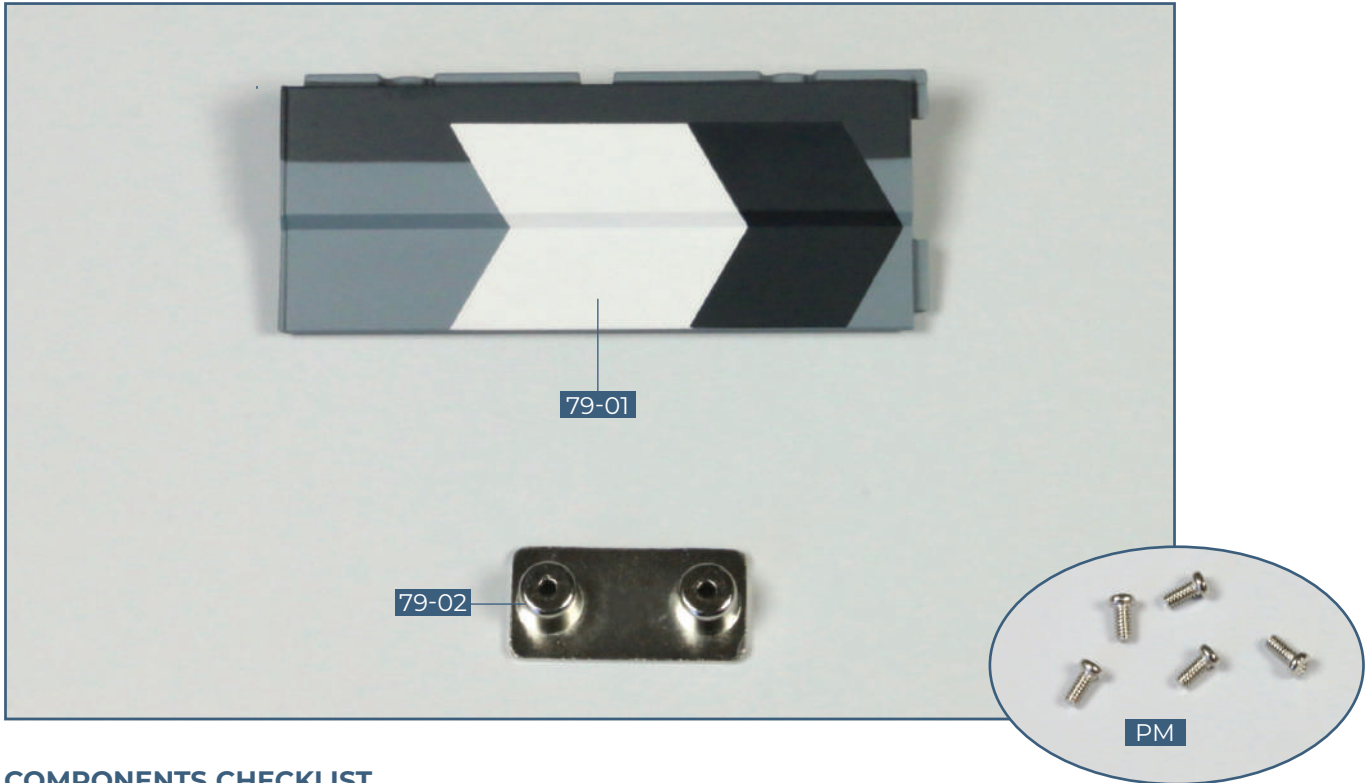
Fit railing **78-07** along the port side of the foremast base **78-01**. Glue in place, as shown.



Completed work

The funnel has been attached to the forward superstructure. The foremast has been assembled and fixed in place.

STAGE 79 THE NEXT HULL SECTION



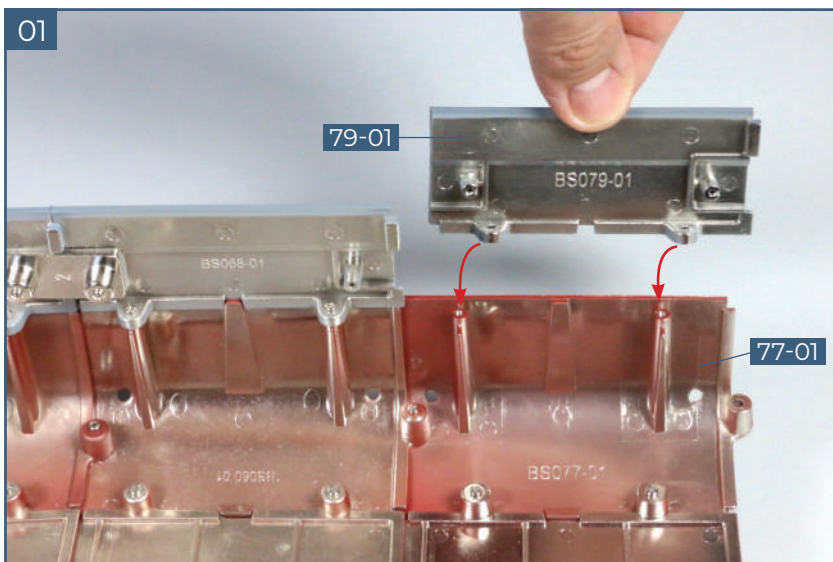
COMPONENTS CHECKLIST

79-01: Upper starboard hull section

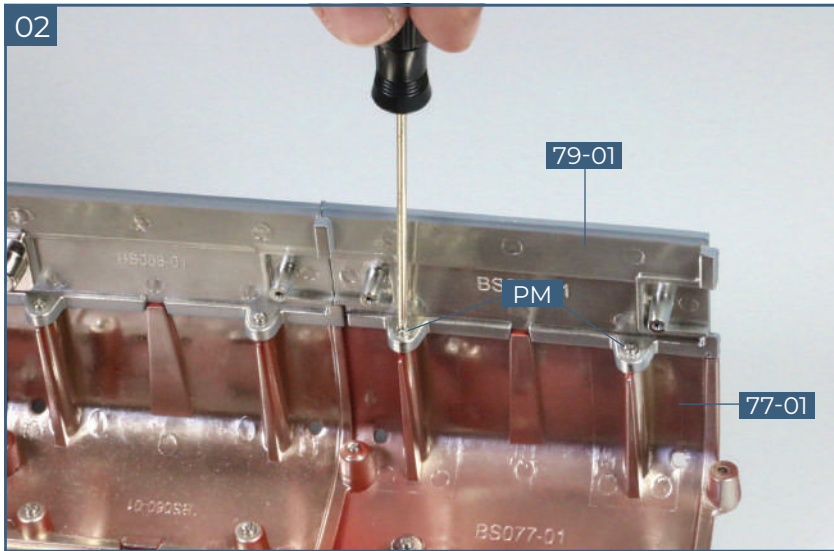
79-02: Connector

PM: Five 2 x 4mm screws

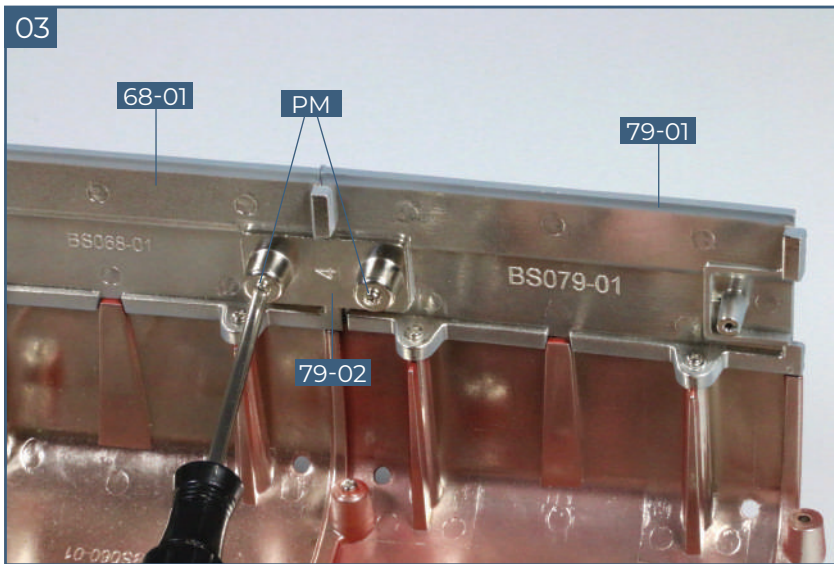
01. FITTING THE HULL SECTION



Take the hull assembly from stage 77. Check the fit of hull section **79-01**; the two screw sockets at the base of the hull section fit on top of the screw sockets in part **77-01**, as indicated.



Fix hull section **79-01** in place with two **PM** screws.



Fit the connector **79-02** over the joint between hull sections **68-01** and **79-01** so that the sockets in the connector fit over the raised screw sockets on the hull sections. Fix in place with two **PM** screws.

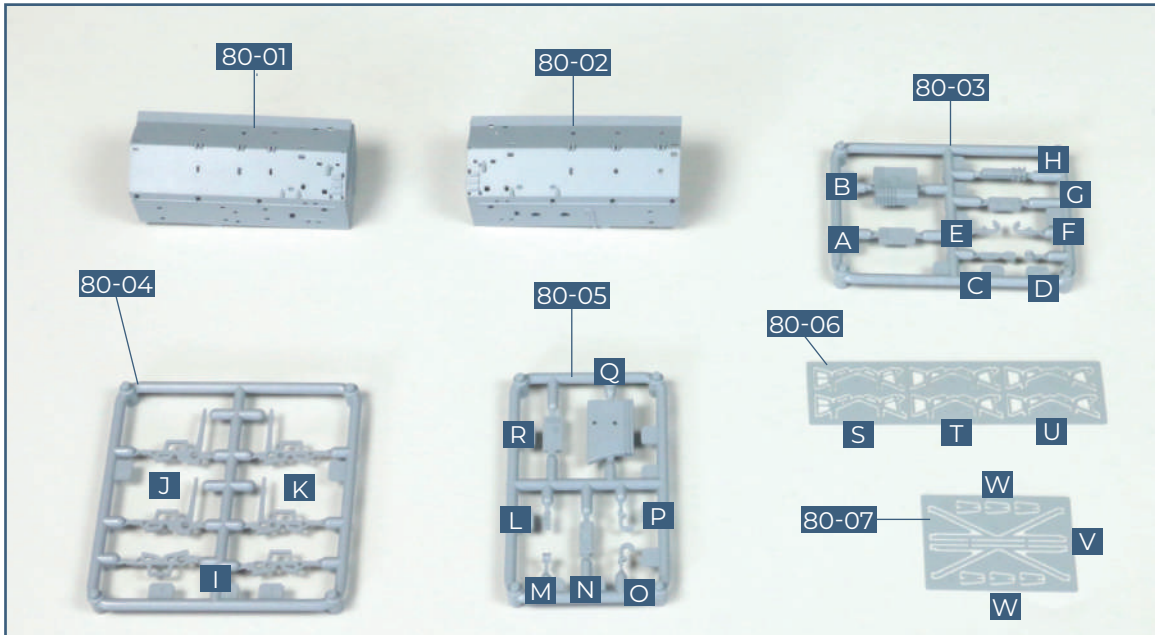


Completed work

Another section has been added to the starboard side of the hull assembly.

STAGE 80

THE TWO AIRCRAFT HANGARS



COMPONENTS CHECKLIST

80-01: Port hangar

80-02: Starboard hangar

80-03: Details for the port hangar (A-H)

80-04: Boat cradles (sides of hangars) (I-K)

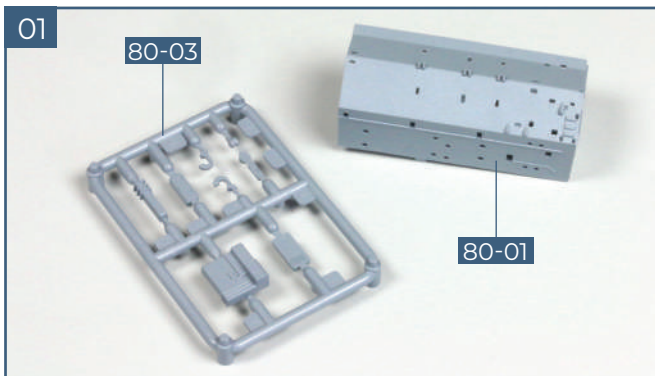
80-05: Details for the starboard hangar (L-R)

80-06: Boat cradles (roofs of hangars) (S-U)

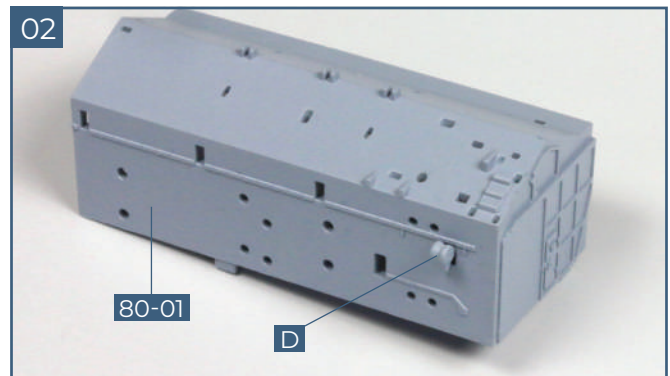
80-07: Support struts (V, W)

NOTE: The cradle parts on frame **80-06** are all very similar. Take some time to identify the three different parts so you can fit them in the right order in the steps on page 44.

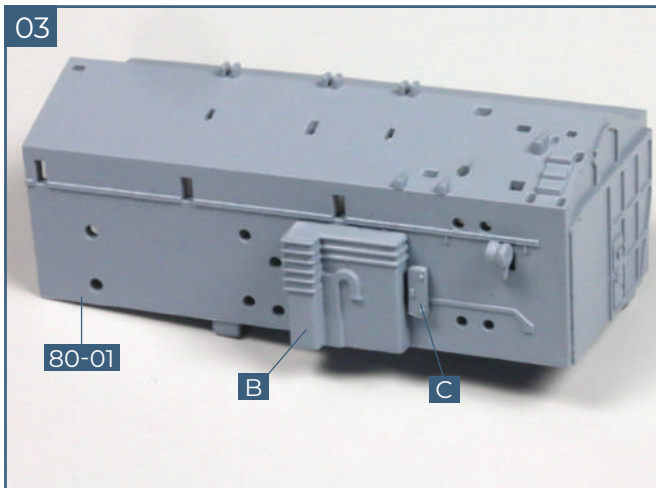
01. DETAILS FOR THE HANGARS



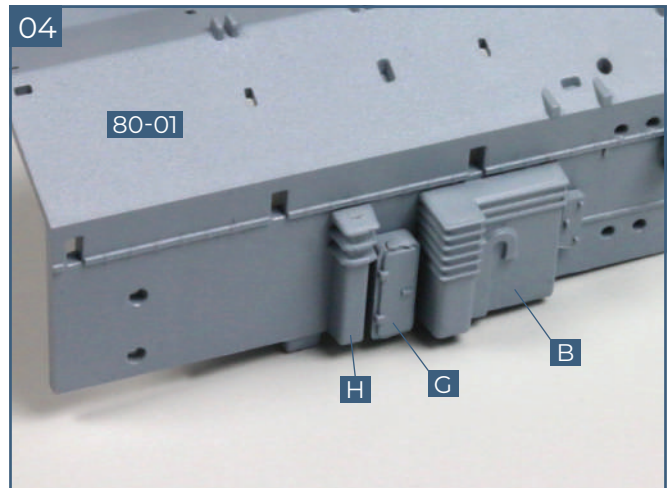
Take the port hangar **80-01** and the frame with the details for the port hangar, **80-03**. Smooth any rough edges when the parts are removed from the frame in the following steps.



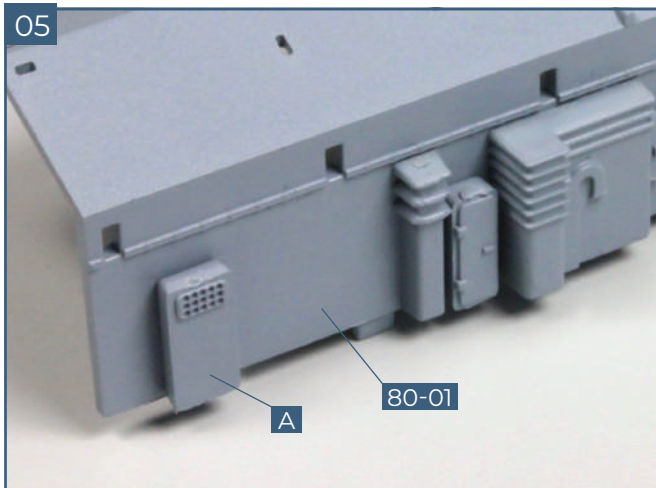
Separate part **D** from frame **80-03**. Check the fit of the peg in the hole on the outer wall of the hangar. Fix in place with a small amount of superglue.



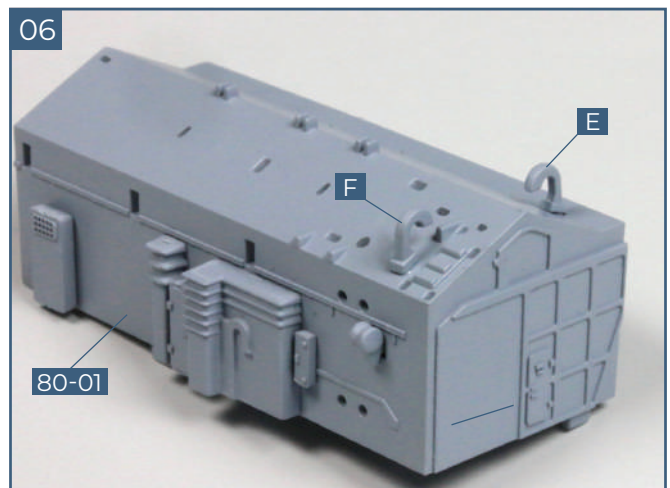
Take the large vent **B** and smaller part **C** from the frame **80-03**. Check the fit and glue in place as shown.



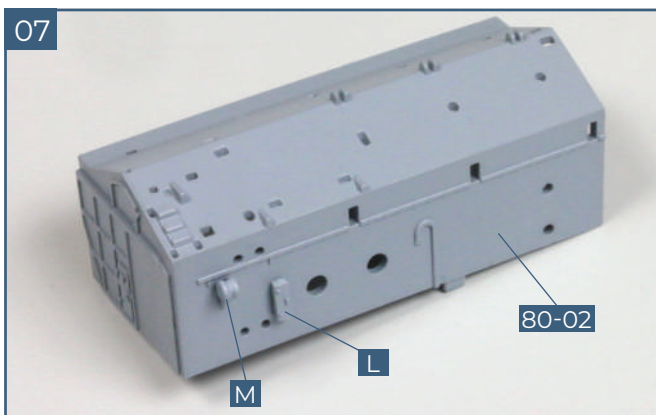
The door **G** and column **H** fit next to part **B** on the outer wall of the hangar **80-01**. Glue in place.



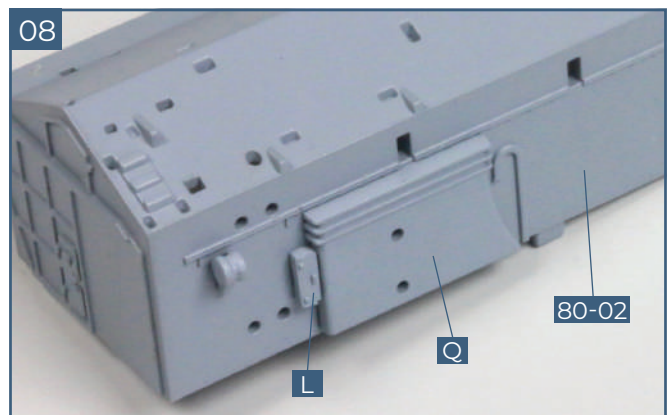
The vent **A** is fitted near the forward end of the side wall of the port hangar **80-01**. Glue in place.



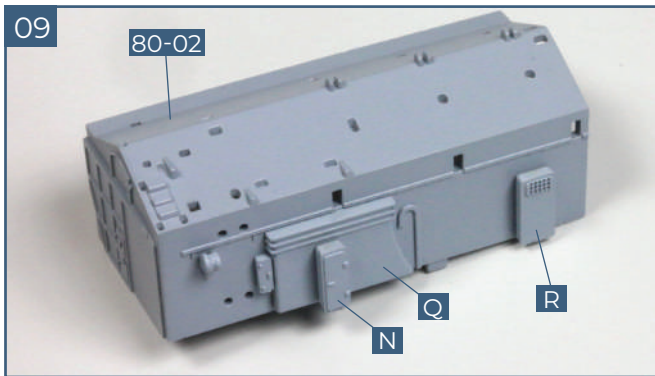
Check the fit of the roof vents **E** and **F** on either side of the roof of hangar **80-01** and glue in place.



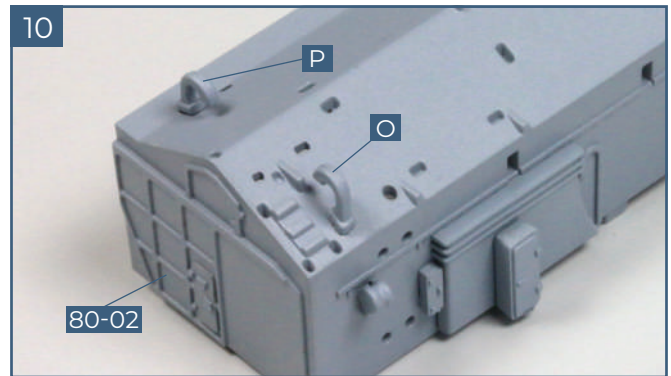
Now take the starboard hangar **80-02** and the frame **80-05**. Cut parts **L** and **M** from the frame, check the fit and glue in place as shown.



The large vent **Q** is fitted along the side of the hangar, next to part **L**, as shown. Glue in place.

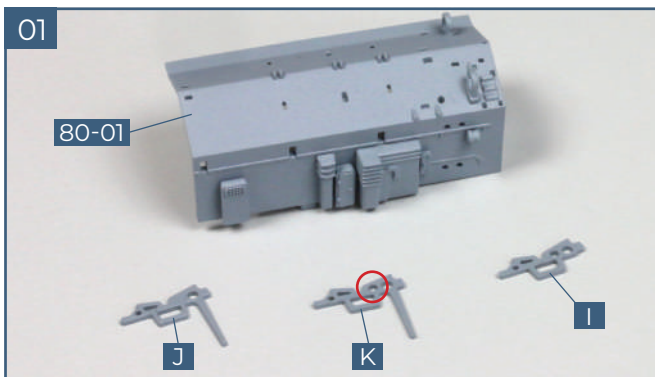


The door, part **N** from frame **80-05** is fitted on the outside of part **Q**. The vent **R** is fitted near the forward end of the hangar **80-02**. Glue them in place.



The two roof vents **O** and **P** are fitted on either side of the roof, as shown. Glue them in place.

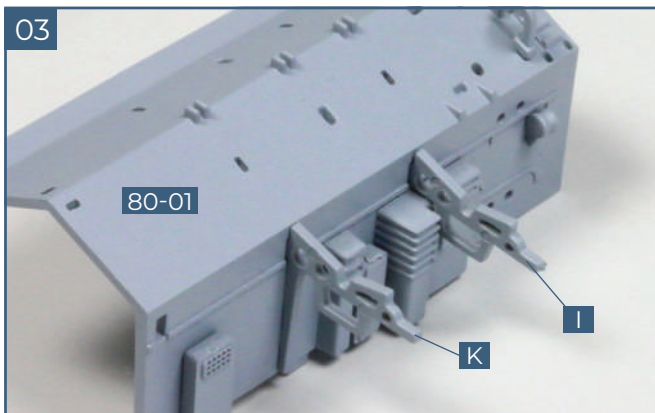
02. THE BOAT CRADLES



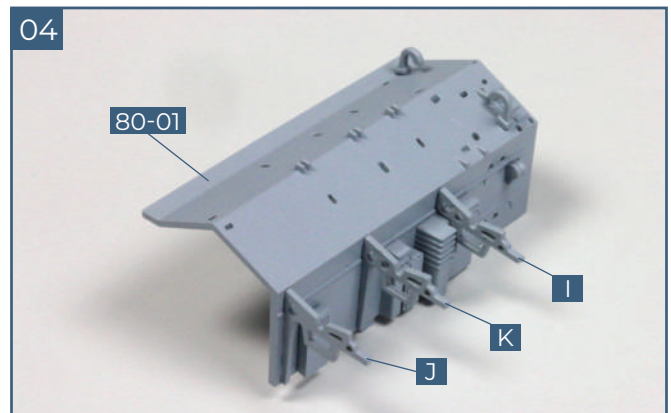
Take the port hangar **80-01**: identify the first three boat cradle parts **I**, **J** and **K** from frame **80-04** and arrange them in the order shown, making sure they are the right way round. Part **K** has an extra hole (circled).



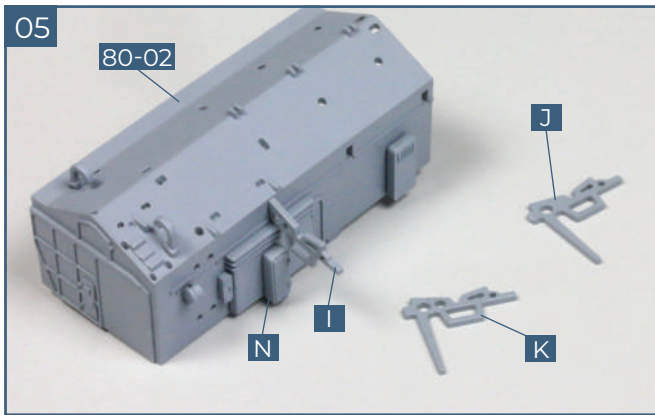
Rectangular pegs on the cradles fit into matching holes in the side of the hangar. Check the fit of part **I** so that it extends at right angles from the hangar wall and glue in place as shown.



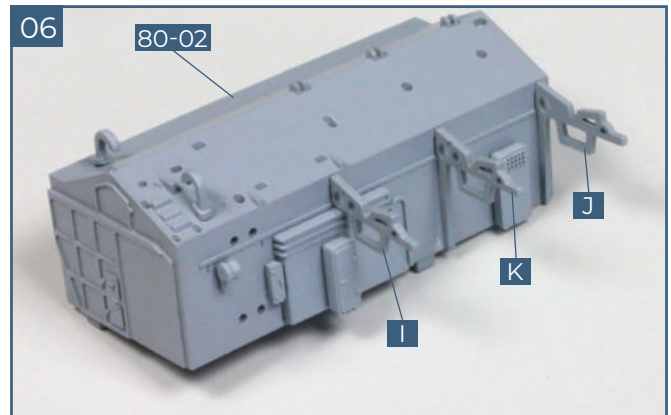
Boat cradle **K** is glued into the next rectangular hole at the top of the outer wall of hangar **80-01**, as shown.



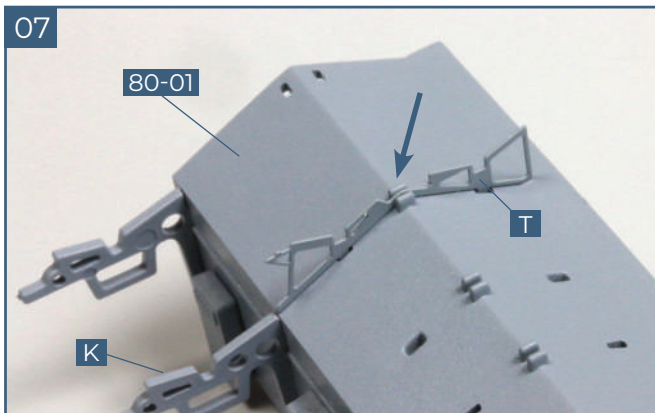
Boat cradle **J** is glued into the rectangular hole at the forward end of the outer wall of hangar **80-01**.



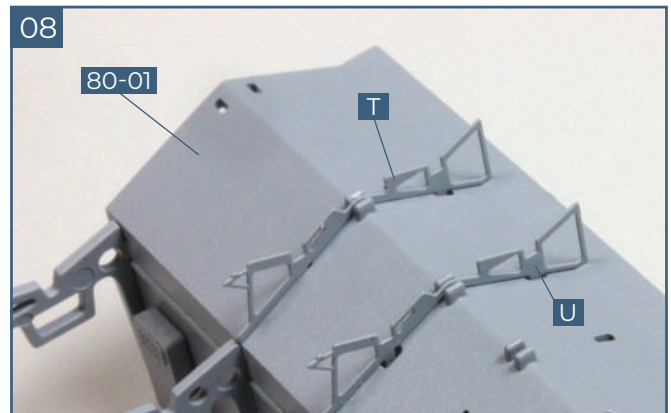
Repeat the steps to fit the boat cradles on the starboard hangar **80-02**: glue the rectangular peg on cradle **I** into the hole at the top of the hangar, near the door **N**.



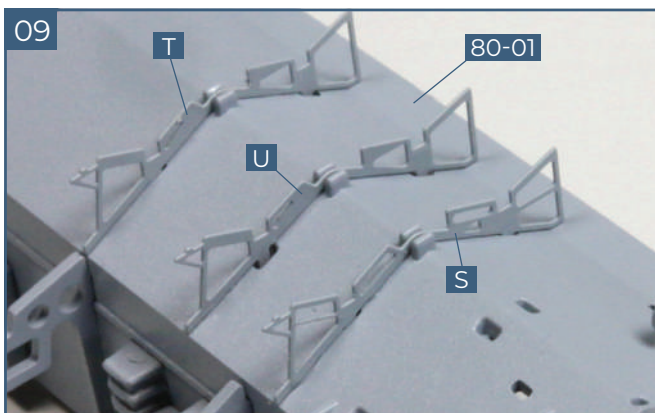
Fix boat cradles **K** and **J** to the outer wall of the right hangar **80-02** as shown.



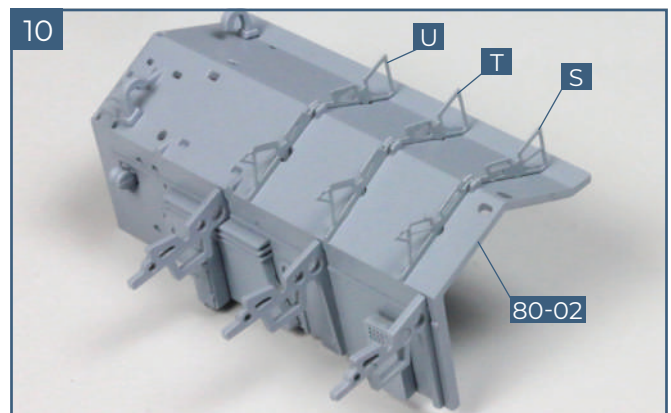
The roof cradles **S**, **T** and **U** from frame **80-6** are fitted next. Starting with the port hangar **80-01**, identify cradle section **T** and fix in place on the roof in line with side cradle **K**. The cradle fits between two flanges at the ridge (arrow).



Next, the boat cradle **U** from frame **80-06** is glued to the roof of hangar **80-01**, as shown in the photo. The legs on this part fit into recesses in the roof, rather than holes.

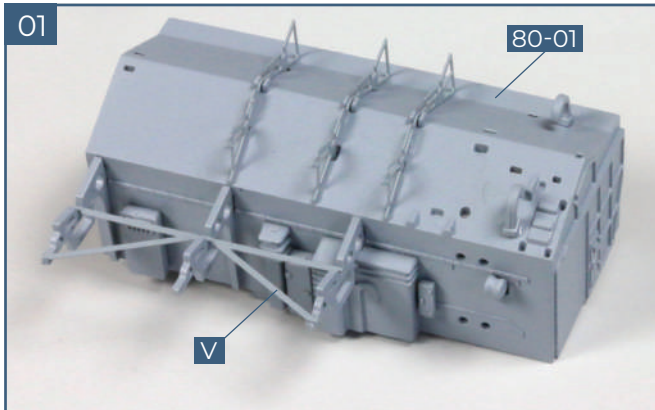


Finally, the boat cradle **S** is glued to the roof of hangar **80-01**, as shown.

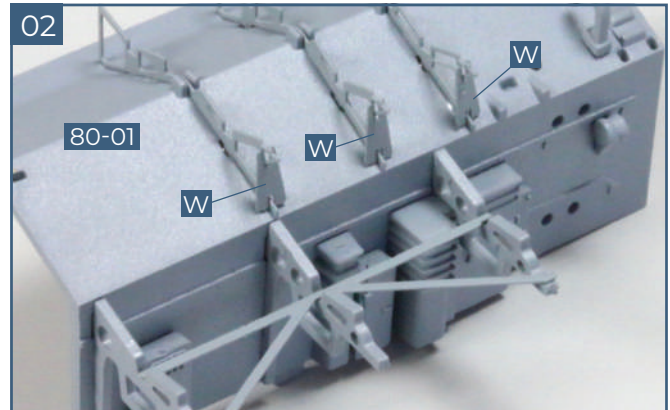


Similarly fit boat cradles **S**, **T** and **U** from frame **80-06** to the roof of the starboard hangar **80-02** in the order shown, so that part **U** fits into recesses and the other parts fit into holes.

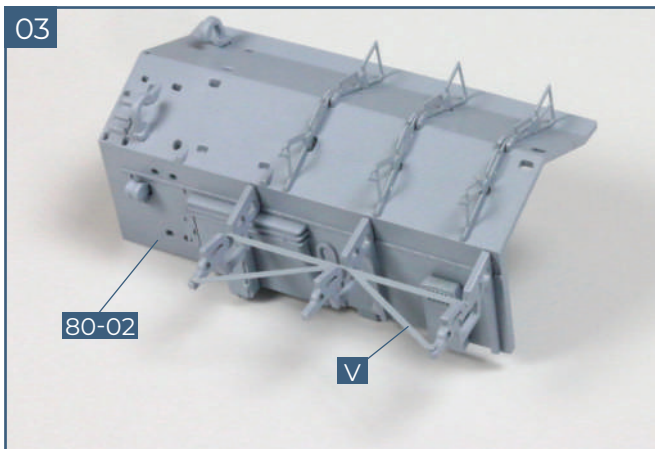
03. SUPPORT STRUTS FOR THE BOAT CRADLES



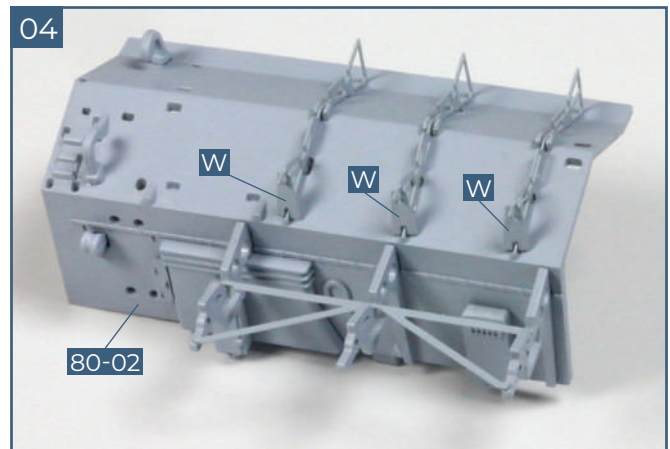
Cut a strut **V** from frame **80-07**. Fit it across the three side cradles on the port hangar **80-01** and glue in place as shown.



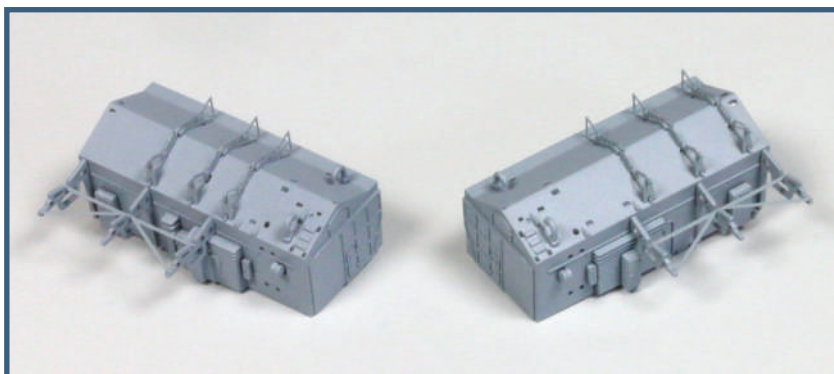
Cut three triangular frames **W** from frame **80-07** and fix to the outer edge of the three cradles on the roof of hangar **80-01** as shown, using a little superglue.



In the same way, fit a strut **V** from frame **80-07** to the side cradles on the starboard hangar **80-02**, gluing in place.



Finally, fit three struts **W** to the ends of the cradles on the roof of the starboard hangar **80-02**, gluing in place as shown.



Completed work

Details have been fitted to the two aircraft hangars, including boat cradles on the roofs and sides. The hangars will be fitted on either side of the funnel in a future stage.