

BISMARCK

THE LEGENDARY BATTLESHIP



Pack 05 | 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 fifth model pack, you will assemble:

STAGE 45: STARTING TO ASSEMBLE THE FORWARD SUPERSTRUCTURE

STAGE 46: THE NEXT HULL SECTION

STAGE 47: ASSEMBLING THE FORWARD SUPERSTRUCTURE

STAGE 48: THE NEXT SECTION OF THE UPPER DECK

STAGE 49: THE NEXT SECTION OF HULL

STAGE 50: A MOTOR FOR THE SECOND 38CM TURRET

STAGE 51: THE SECOND 38CM GUN TURRET

STAGE 52: THE NEXT HULL SECTION

STAGE 53: COMPLETING THE SECOND GUN TURRET

STAGE 54: THE NEXT HULL SECTION

STAGE 55: MOTOR FOR THE SECOND GUN TURRET

STAGE 56: A KEEL SECTION

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.

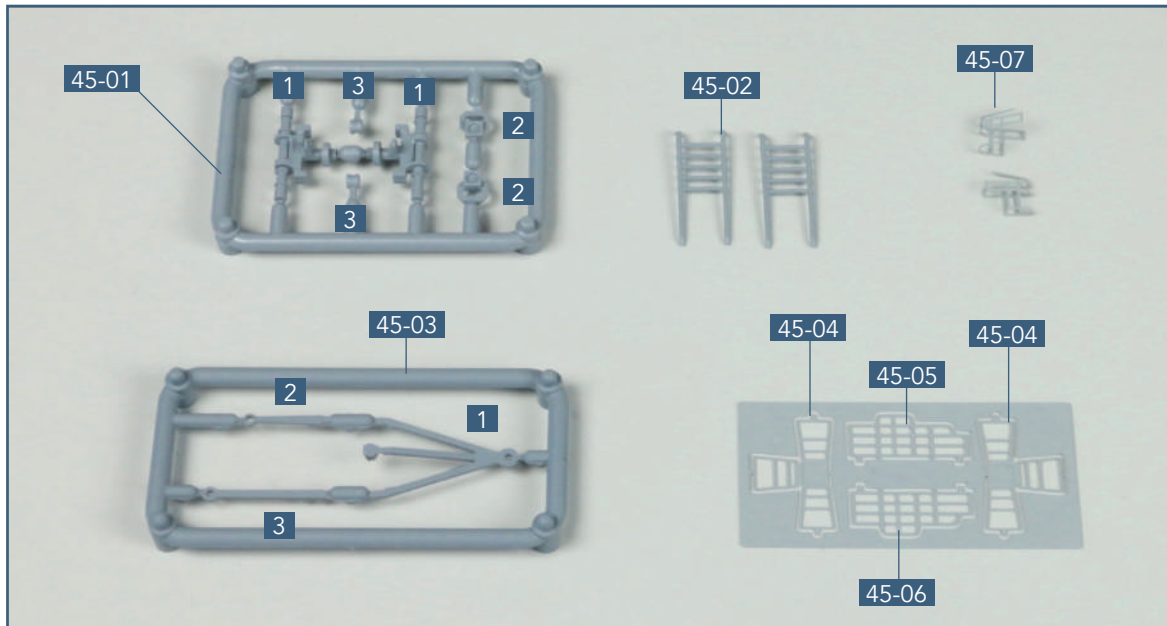
During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.



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 45

STARTING TO ASSEMBLE THE FORWARD SUPERSTRUCTURE



COMPONENTS CHECKLIST

45-01: Details for the admiral's bridge deck

45-02: Two ladders

45-03: Three antenna outriggers

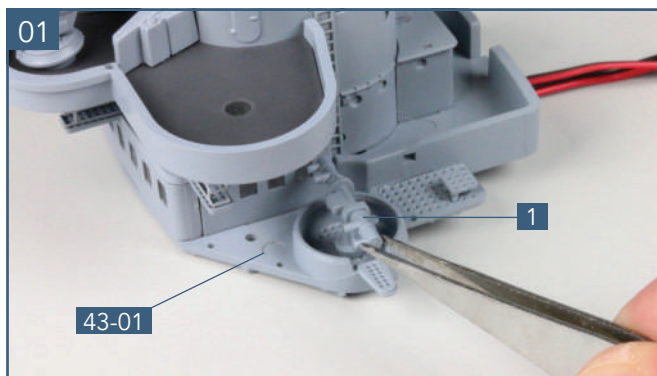
45-04: Two ladder platforms

45-05: Starboard railing

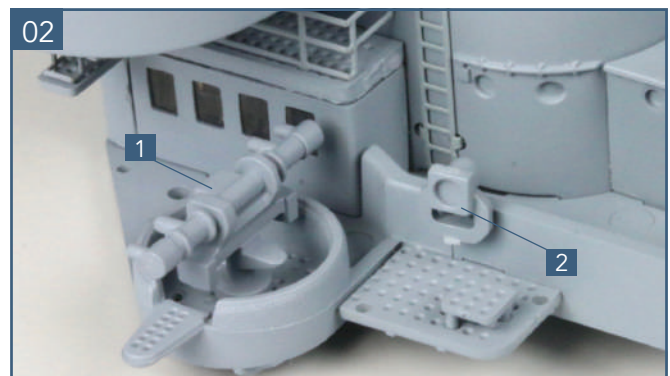
45-06: Port railing

45-07: Two curved railings

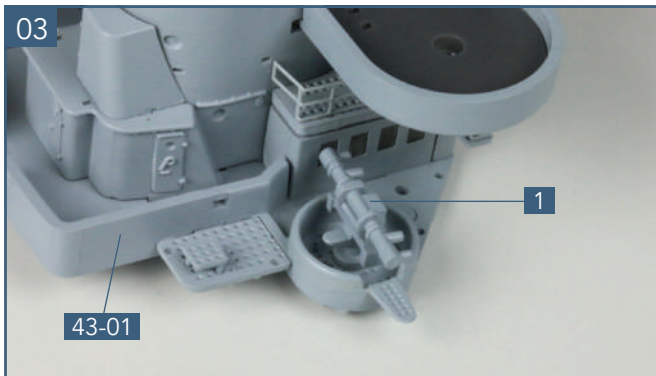
01. RANGEFINDER AND SEARCHLIGHTS



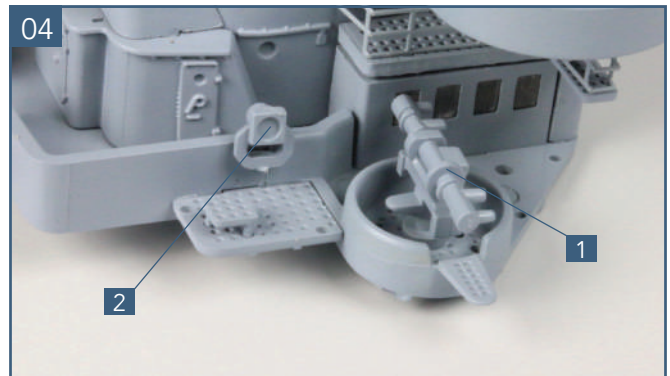
Take the admiral's bridge assembly from stage 43. Cut one of the two rangefinders, **1**, from frame **45-01**. Identify the fixing point on the round platform on the port side of the admiral's bridge deck **43-01**. Check the orientation and fit, then glue in place as shown.



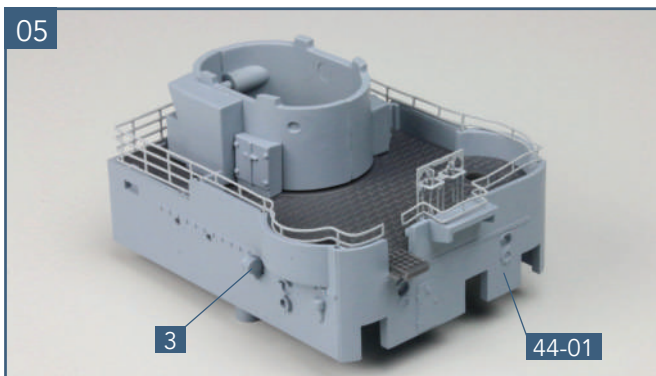
Cut one of the signal lamps, **2**, from frame **45-01**. Identify the fixing point on the port side of the admiral's bridge deck **43-01** and check the fit. Apply a little superglue to the peg on the back of the signal lamp and fix in place.



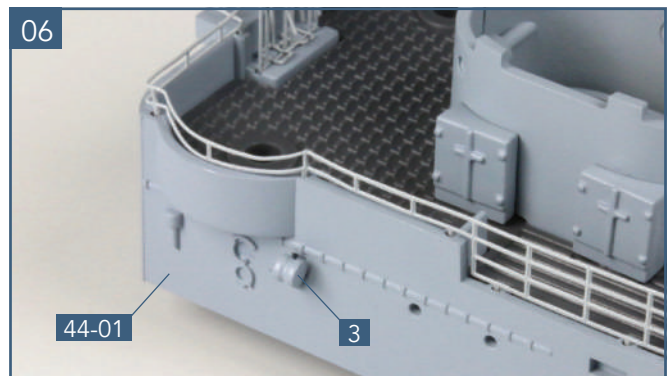
Cut the second rangefinder, **1**, from frame **45-01**. Identify the fixing point on the round platform on the starboard side of the admiral's bridge deck **43-01**. Check the orientation and fit, then glue in place as shown.



In the same way as described in step **2**, cut the second signal lamp, **2**, from the frame and glue in place on the starboard side of the admiral's bridge deck **43-01**.

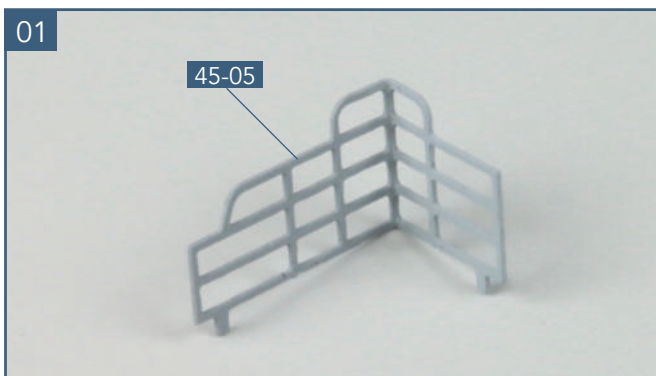


Take the upper mast deck assembly from the previous stage. Cut one of the loudspeakers, **3**, from frame **45-01**. Identify the fixing point on the starboard side of the upper mast deck **44-01** and check the fit. Fix in place with a little superglue.

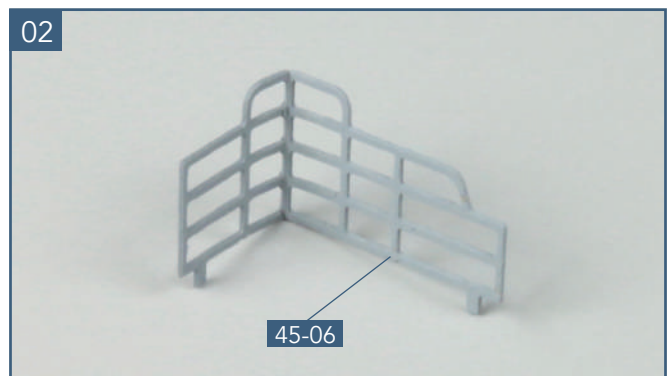


Cut the second loudspeaker, **3**, from frame **45-01** and glue in place on the port side of the upper mast deck as shown.

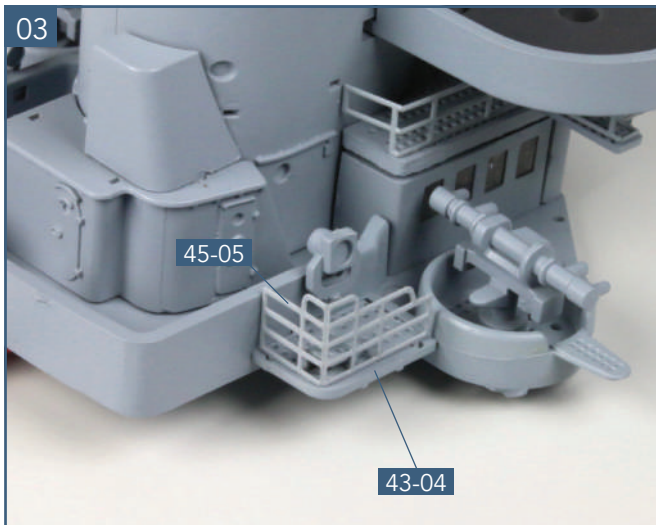
02. RAILINGS, PLATFORMS AND LADDERS



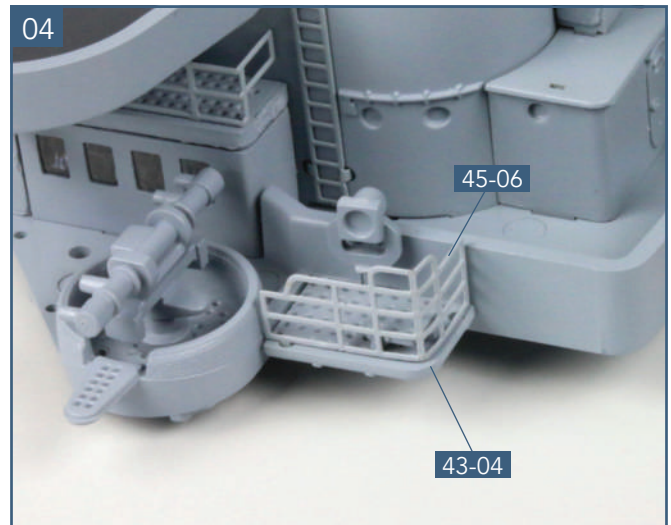
Take the starboard railing **45-05**. Bend the railing at right angles along the indent, as shown.



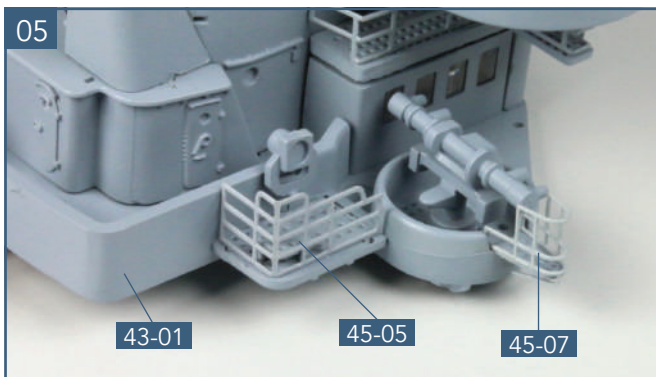
Repeat with the port railing **45-06**. The resulting railing is a mirror image of the previous railing **45-05**.



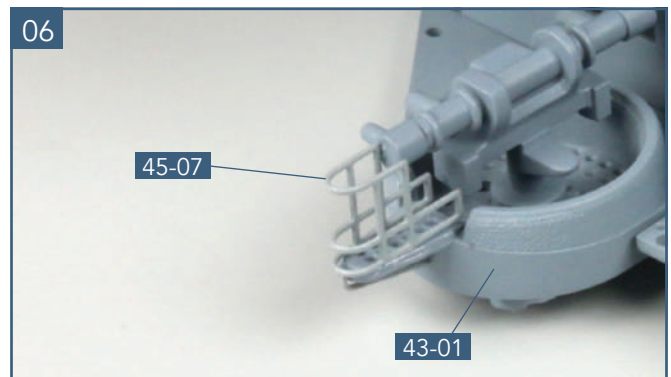
Test the fit of the starboard railing **45-05** on the grating **43-04** on the starboard side of the admiral's bridge deck and glue in place.



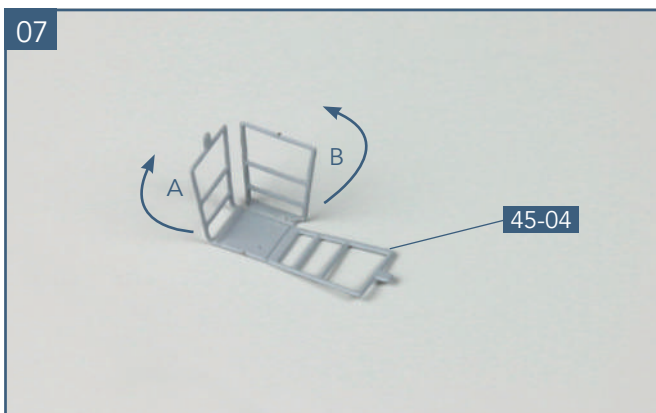
Similarly, glue the port railing **45-06** in place on the grating **43-04** on the port side of the admiral's bridge deck.



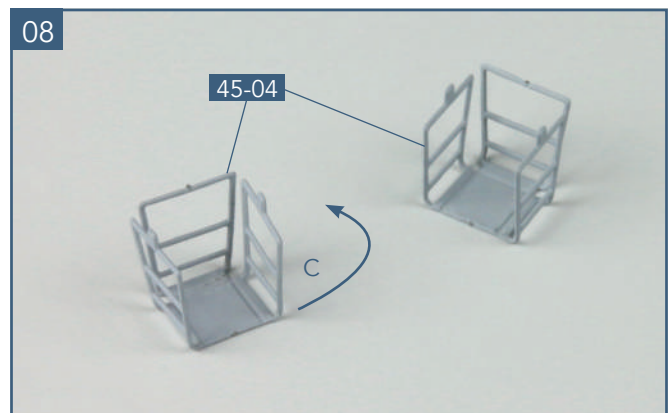
Returning to the starboard side of the admiral's bridge deck **43-01**, identify the fixing point for the railing **45-07**, beyond the arm of the rangefinder. Test the fit and glue in place.



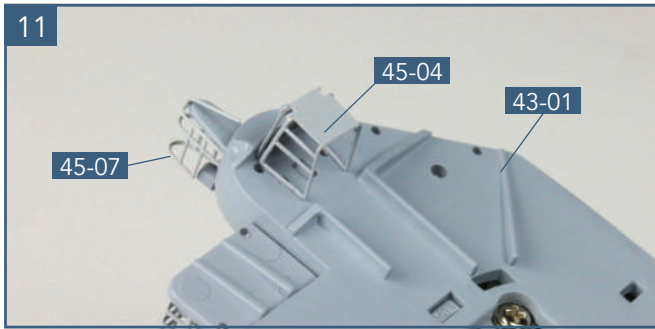
Similarly, glue the second railing **45-07** in place on the port side of the admiral's bridge deck.



Cut the first platform **45-04**, with its railings, from the frame. Bend one side upwards at right angles (A) and then bend the middle piece (B) upwards at right-angles.



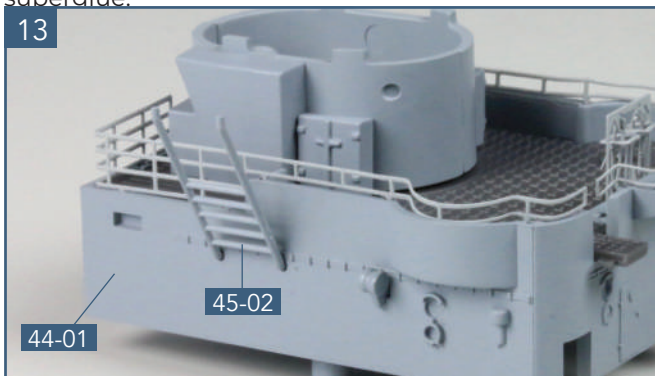
Finally, bend the third side upwards (C). Repeat to build the second platform and railings.



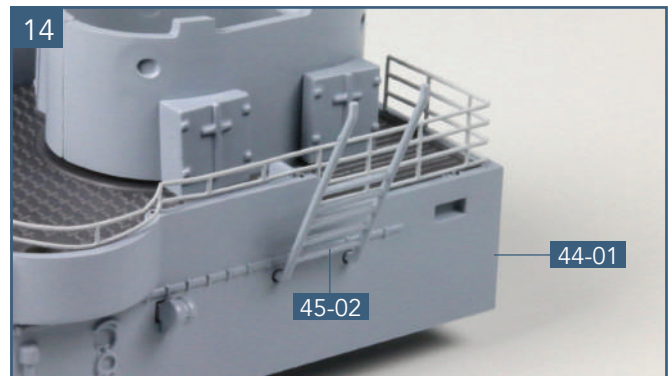
Turn the admiral's bridge deck assembly **43-01** upside down. Identify the fixing point for the first platform **45-04**. The open side should face towards the centre of the model. Fix in place with a little superglue.



In the same way, glue the second platform **45-04** in place on the underside of the admiral's bridge deck **43-01**.

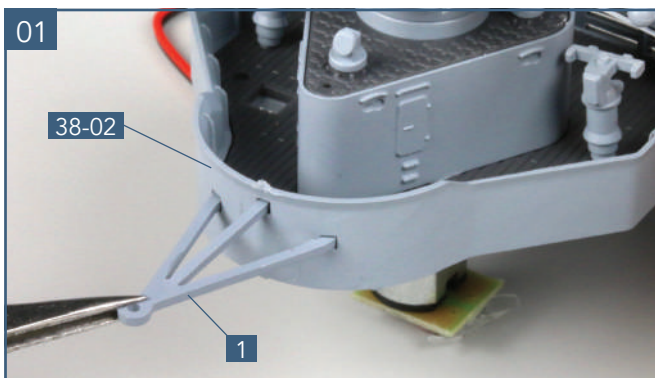


The next step is to fit a ladder **45-02** on the starboard side of the upper mast deck **44-01**. To do this, fit the two spars at the end of the ladder into the holes in the deck wall, as shown. Glue in place.

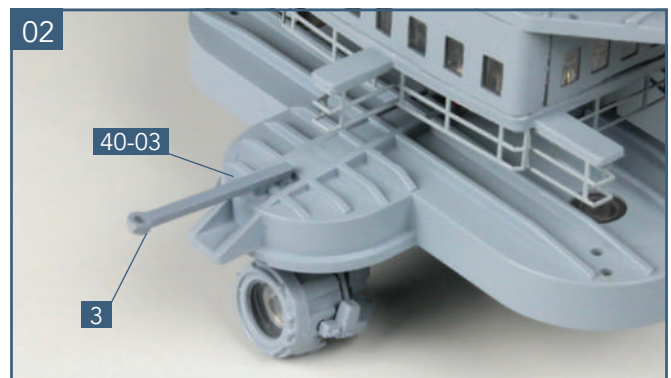


In the same way, glue the second ladder **45-02** in place on the port side of the upper mast deck **44-01**, as shown.

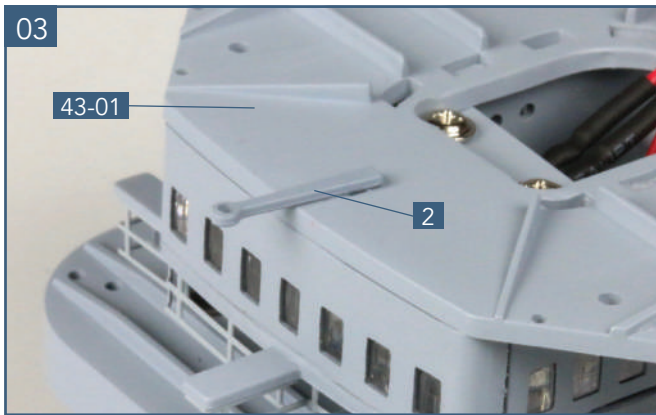
04. ANTENNA OUTRIGGERS AND SUPERSTRUCTURE ASSEMBLY



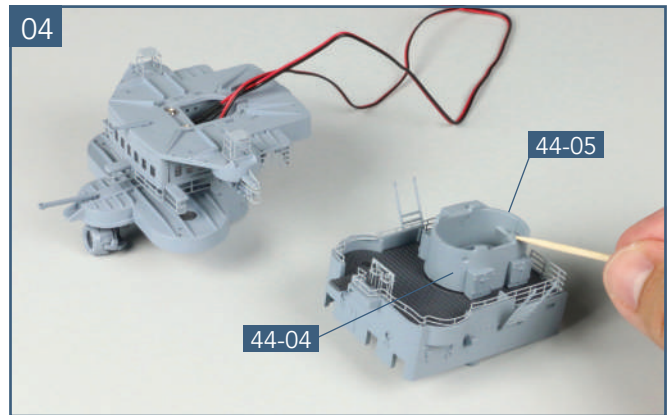
Take the foretop gallery **38-02**; cut the antenna outrigger **1** from its frame **45-03**. Note that this part has three arms. Identify the fixing points on the front of the foretop gallery and glue in place.



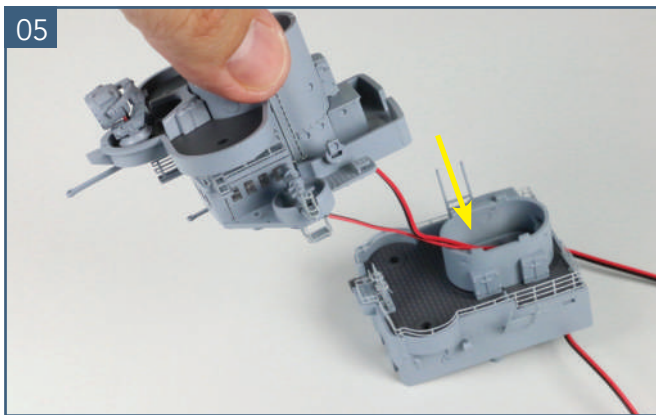
Take the admiral's bridge assembly and cut the antenna outrigger **3** from its frame. Identify the fixing point for the outrigger on the underside of the searchlight platform **40-03** and glue in place as shown.



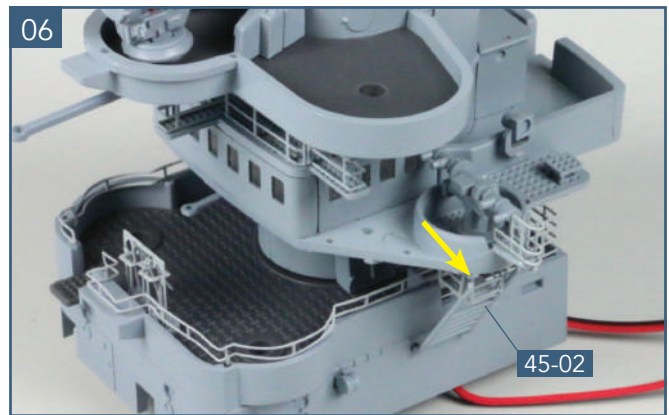
Identify the fixing point for antenna outrigger **2** and glue in place at the lower edge of the front of the admiral's bridge deck **43-01**, as shown.



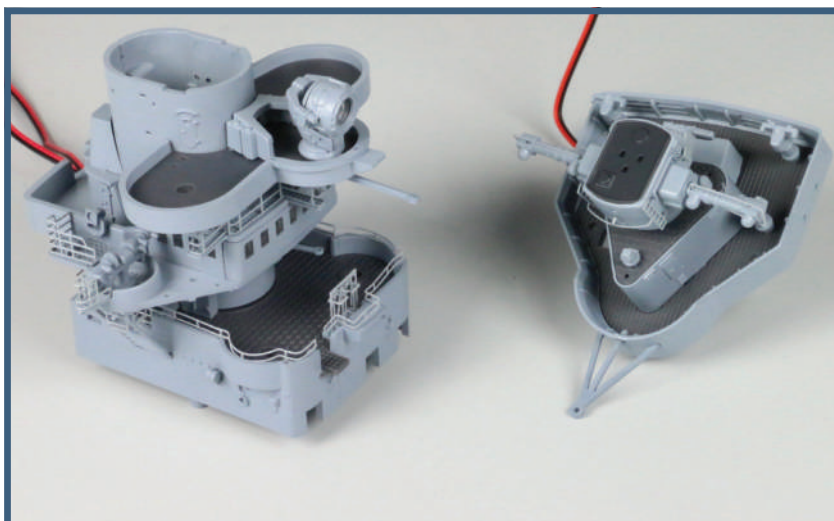
Take the upper mast deck assembly and the assembly from the previous step and check the fit to ensure you have the parts the right way round, as shown. Apply a little superglue around the top of the conning tower **44-04** and **44-05**.



Pass the cables from the admiral's bridge assembly through the large opening in the upper mast deck, as indicated by the yellow arrow.



Fix the two assemblies together so that the spars of the two ladders **45-02** fit into the holes on the underside of the admiral's bridge deck (see arrow).



Completed work

The lower and middle sections of the forward superstructure have been fixed together. Railings, antenna outriggers and other details have been fitted. The foretop gallery (on the right) will be fitted in a future stage.

STAGE 46 THE NEXT HULL SECTION

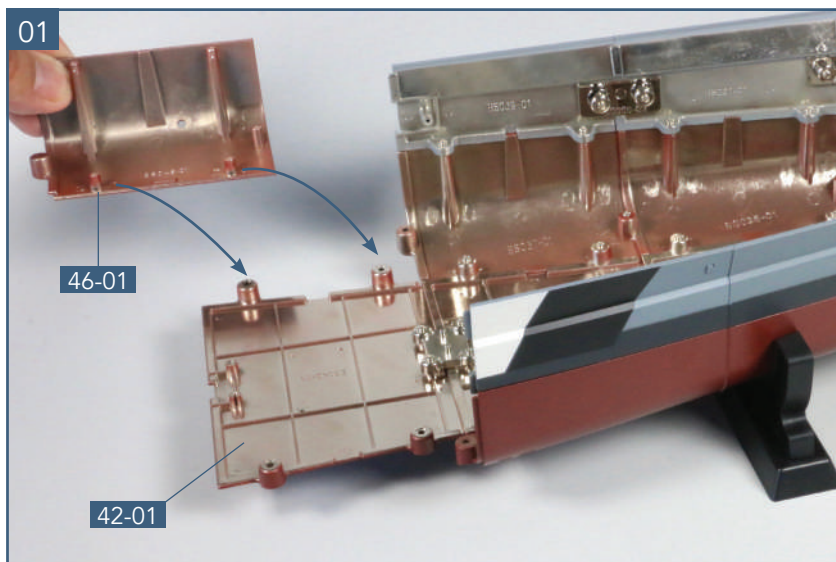


COMPONENTS CHECKLIST

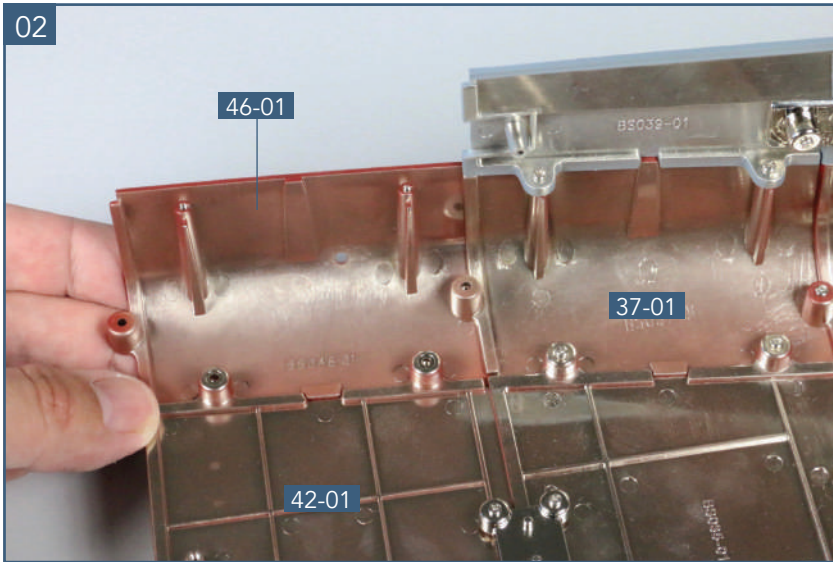
46-01: Lower port hull section

Four **PM** 2 x 4 mm screws

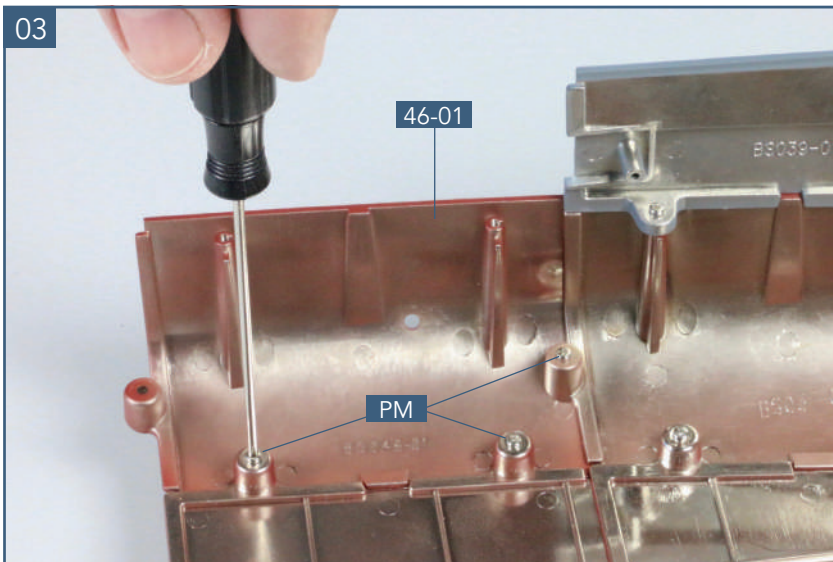
01. FITTING THE NEXT HULL SECTION



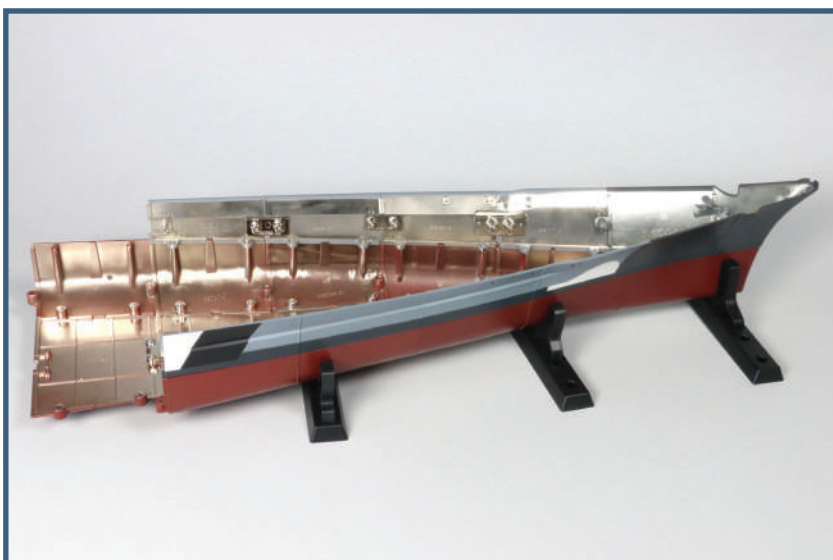
Take the hull assembly from stage 42. Take the lower port hull section **46-01** and position against the keel section **42-01**, as indicated.



When correctly fitted, the raised screw sockets on lower port hull section **46-01** fit into corresponding sockets on the hull section **37-01** and the keel **42-01**.



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

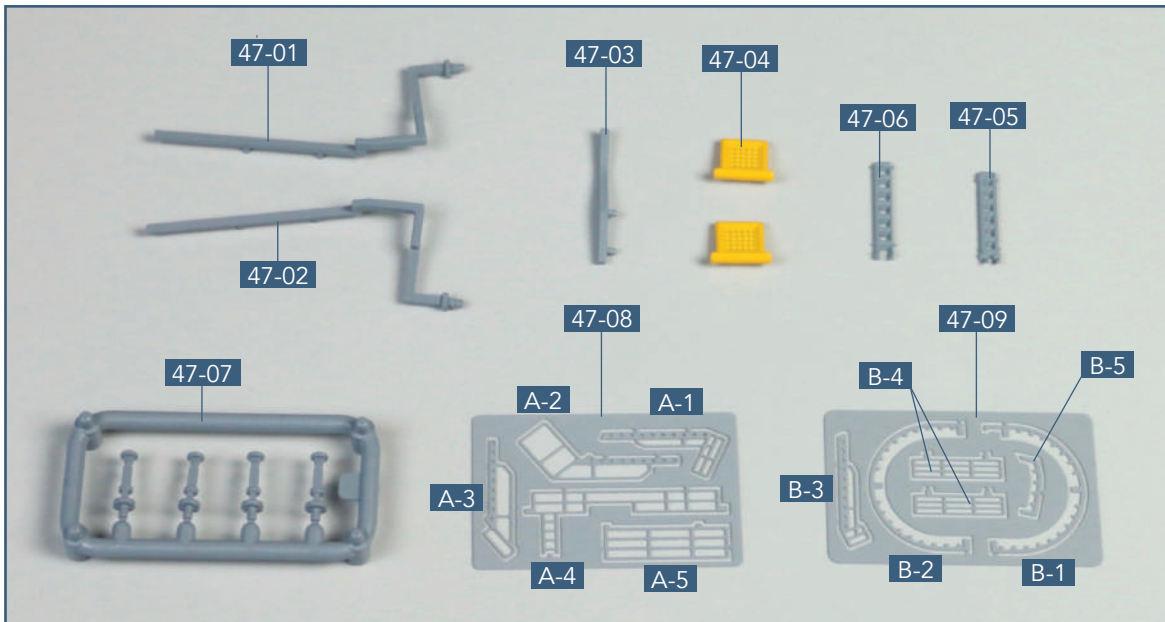


Completed work

Another section has been added to the hull.

STAGE 47

ASSEMBLING THE FORWARD SUPERSTRUCTURE

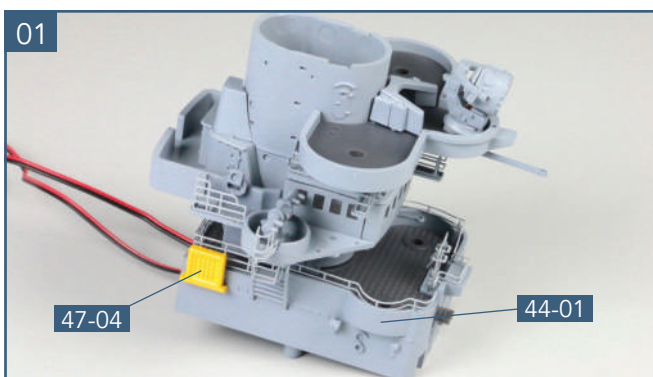


COMPONENTS CHECKLIST

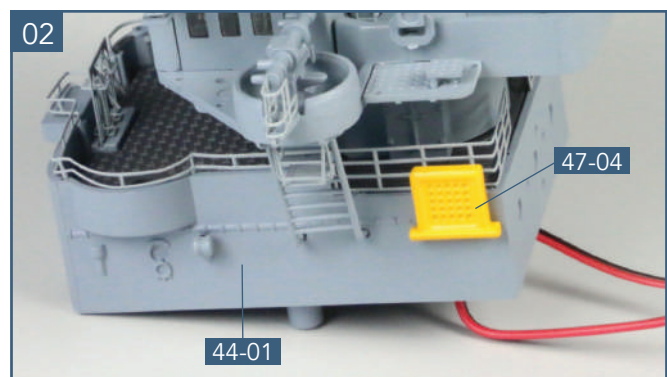
- | | |
|------------------------------|--|
| 47-01: Port pipe | 47-06: Ladder |
| 47-02: Starboard pipe | 47-07: Four compasses |
| 47-03: Middle pipe | 47-08: Railings |
| 47-04: Two life rafts | 47-09: Rails and semicircular rails |
| 47-05: Ladder | |

NOTE: The wiring from all the decks of the forward superstructure are fed down through the central opening at the base of the assembly. In total, there are seven cables (see section 3, Final assembly of the superstructure).

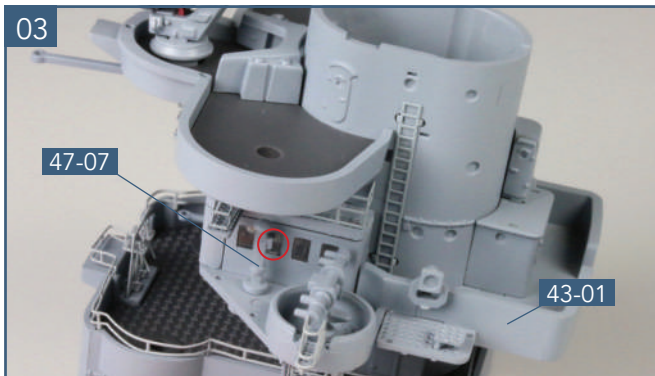
01. FITTING THE LIFE RAFTS AND COMPASSES



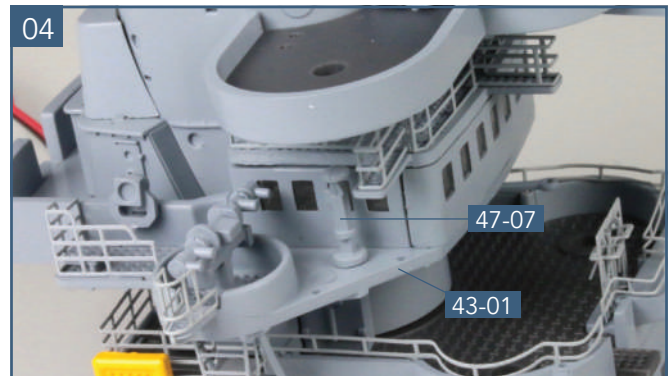
Apply a little superglue to the tab on the back of the first life raft **47-04** and fix it in place in the recess on the starboard side of the lower mast deck **44-01**.



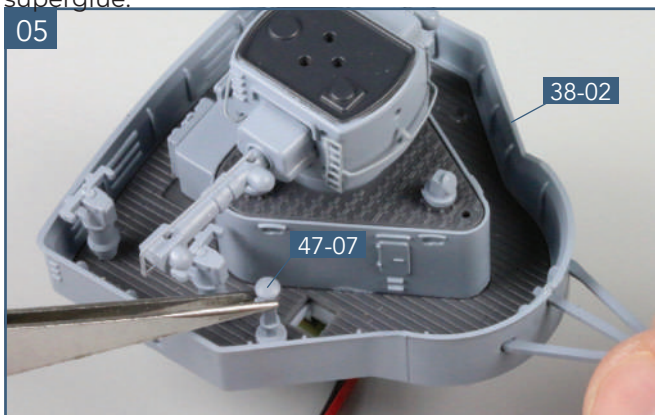
Glue the second life raft **47-04** in place on the port side of the lower mast deck **44-01** as shown.



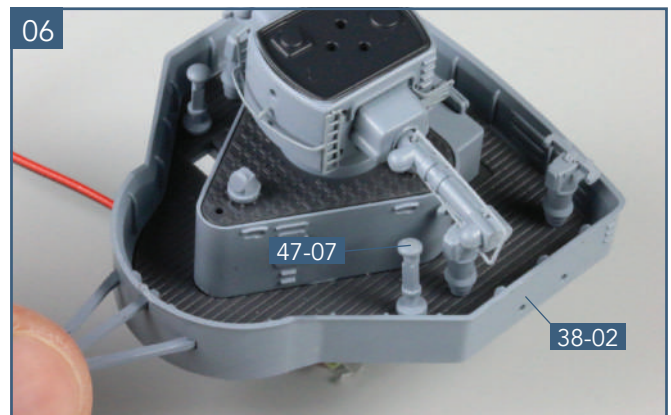
Identify the fixing point for the first compass **47-07** on the port side of the admiral's bridge **43-01**, as shown, ensuring that the protrusion on the compass (circled) faces the right way. Fix in place with a little superglue.



Glue the second compass **47-07** in place on the starboard side of the admiral's bridge **43-01**. As in the previous step, make sure it is facing the right way.

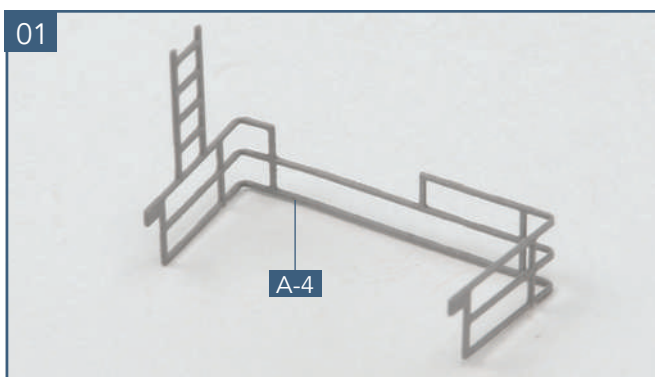


Identify the fixing point for the third compass **47-07** on the starboard side of the foretop gallery **38-02** and fix in place with a little superglue.

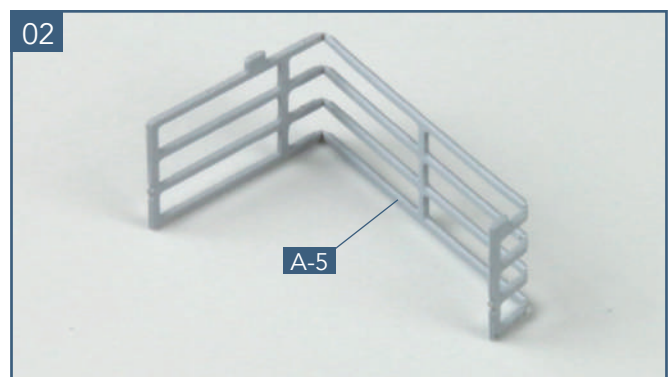


Glue the fourth compass **47-07** in place on the port side of the foretop gallery **38-02**.

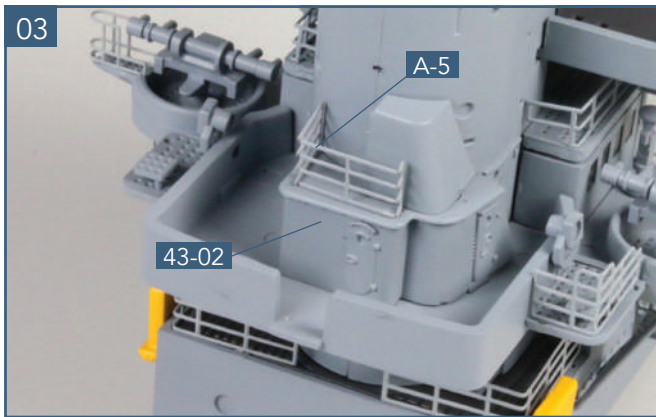
02. RAILINGS AND RAILS FOR THE SUPERSTRUCTURE



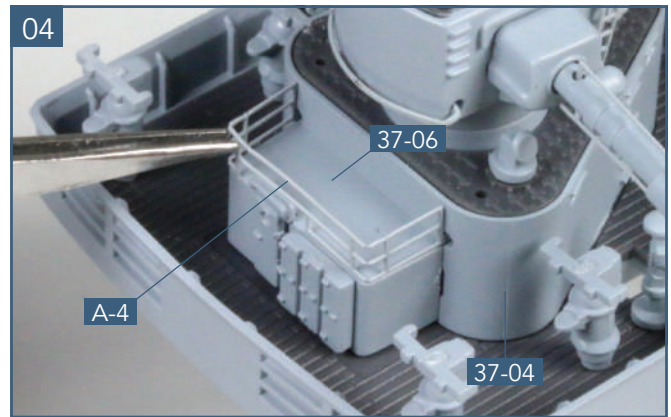
Cut the railing **A-4** from frame **47-08**. Bend it at right angles along the two fold lines as shown. (Shown here upside down.)



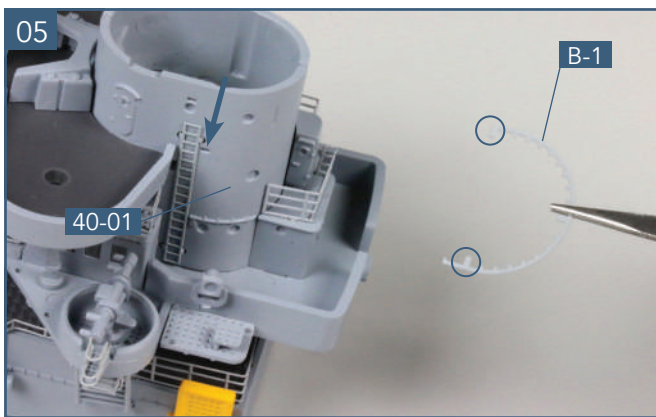
Cut the railing **A-5** from frame **47-08** and bend it at right angles along the two fold lines as shown.



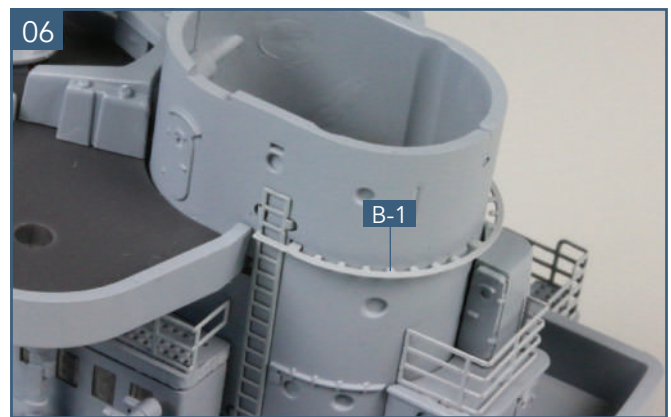
Identify the fixing point for railing **A-5** around the top of the shelter **43-02** at the rear of the admiral's bridge. Glue in place with a tiny drop of superglue on the ends of the uprights.



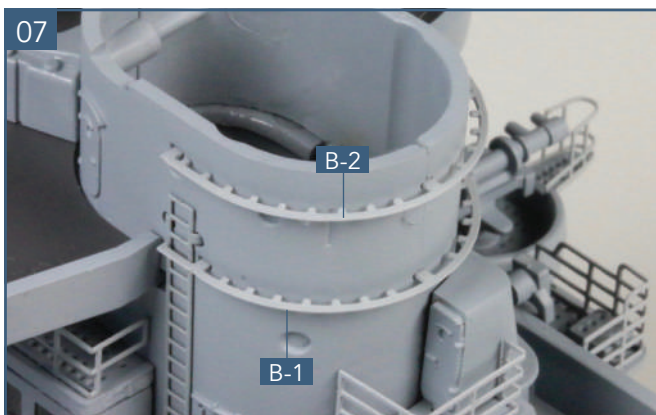
The railing **A-4** is fitted on the attachment **37-06** at the rear of the foretop command post **37-04**. Glue in place as shown, with the ladder running down the far side of the attachment.



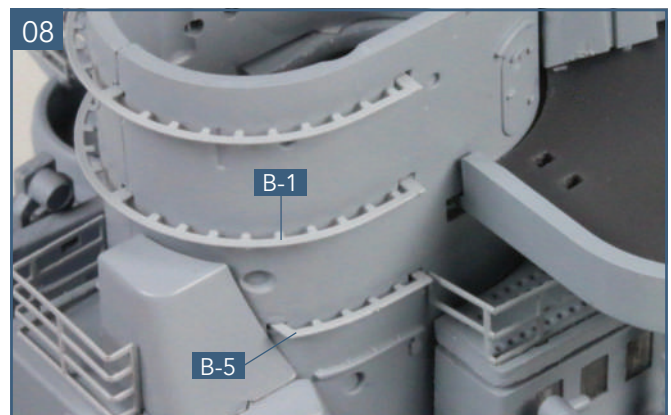
Cut the semicircular rail **B-1** from frame **47-09**. Note that the part is not symmetrical, and ensure the large pegs (circled) fit into recesses on the conning tower **40-01** (arrow). Fix the pegs in place with superglue.



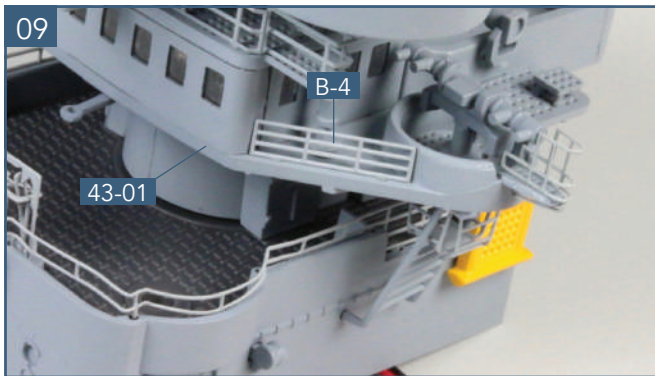
This shows the semicircular rail **B-1** fixed in place.



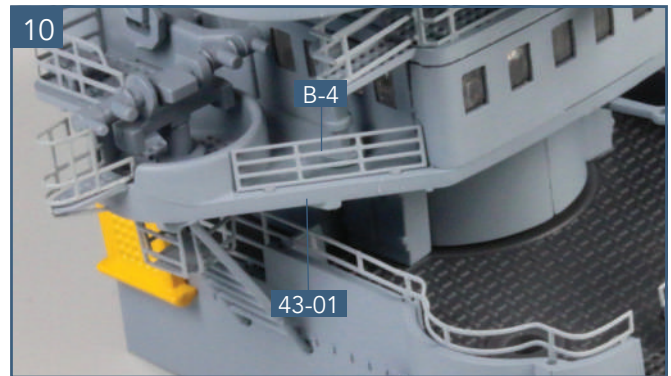
Cut the semicircular rail **B-2** from frame **47-09**. Glue it in place around the conning tower **40-01** above rail **B-1**, fitting the pegs into recesses, as before.



The short rail **B-5** is mounted below **B-1** on the starboard side of the conning tower. Glue the pegs into the recesses as shown.

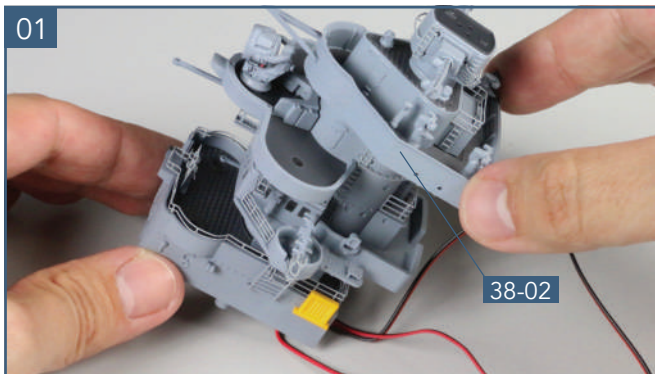


Cut the first railing **B-4** from frame **47-09** and identify the fixing point on the port side of the admiral's bridge **43-01**. Apply a little superglue to the lower ends of the uprights and fix in place.

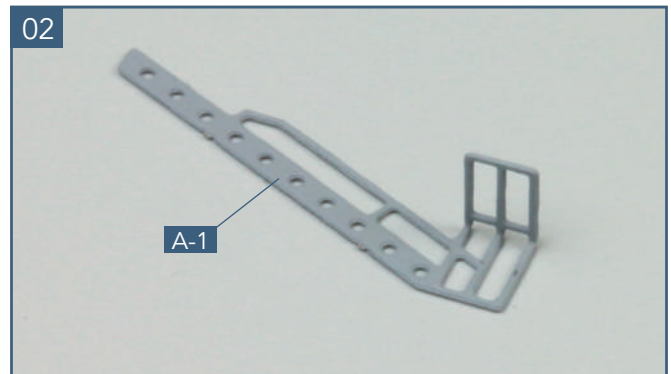


In the same way, fix the second railing **B-4** on the starboard side of the admiral's bridge.

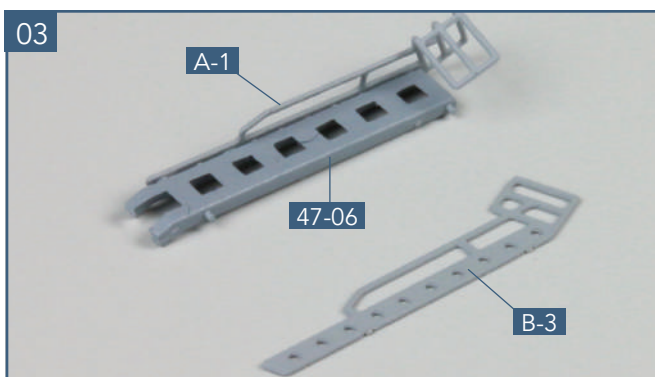
03: FINAL ASSEMBLY OF THE SUPERSTRUCTURE



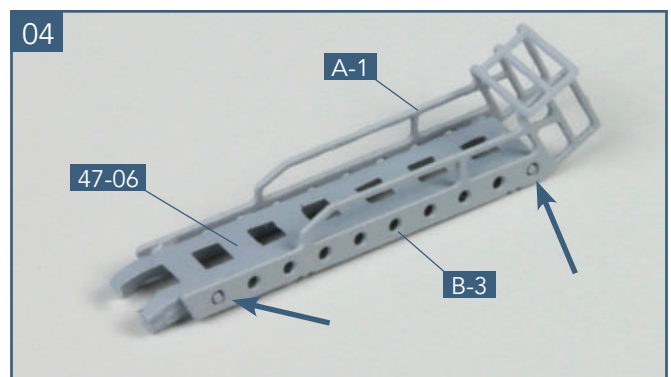
Test the fit of the top part of the superstructure on the middle section. Apply a little superglue to the top of the middle part of the superstructure and fix the underside of the foretop gallery **38-02** in place.



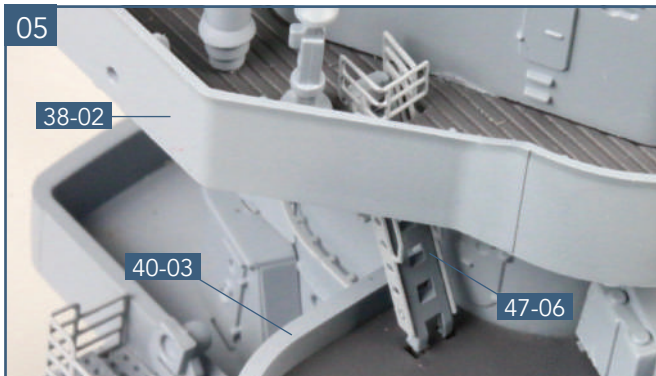
Cut the ladder side and railing **A-1** from frame **47-08**. Bend the railing at the top of part **A-1** at right angles along the fold line.



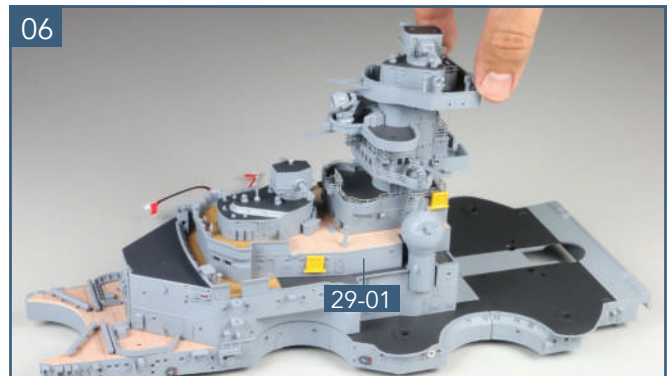
Take the longer ladder, **47-06**. Glue the ladder side and railing **A-1** to the ladder **47-06**: two pegs on the side of the ladder fit into holes in part **A-1**. Cut the ladder side and railing **B-3** from frame **47-09**.



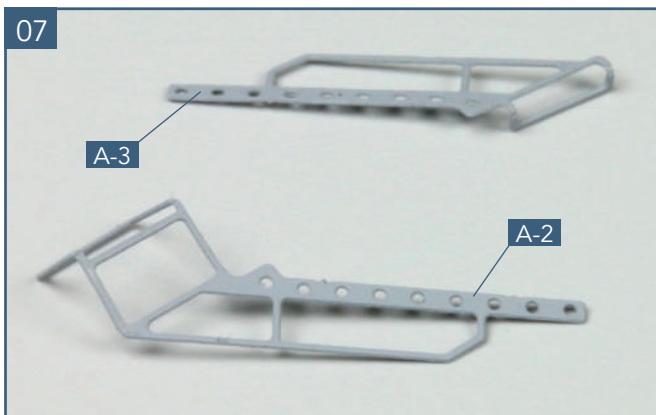
Glue ladder side and railing **B-3** to the other side of ladder **47-06**. In this photo, you can see how the pegs on the ladder are located in the holes on the ladder side (arrows).



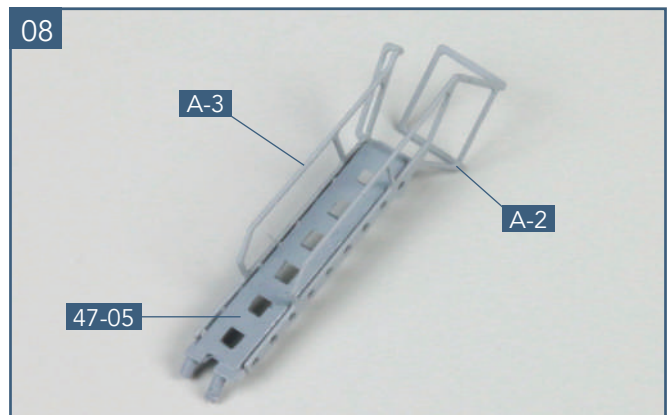
The ladder assembly from step 4 leads up from the searchlight deck **40-03** to the foretop gallery **38-02**. Identify the fixing point and glue the base of the ladder in place to the decking.



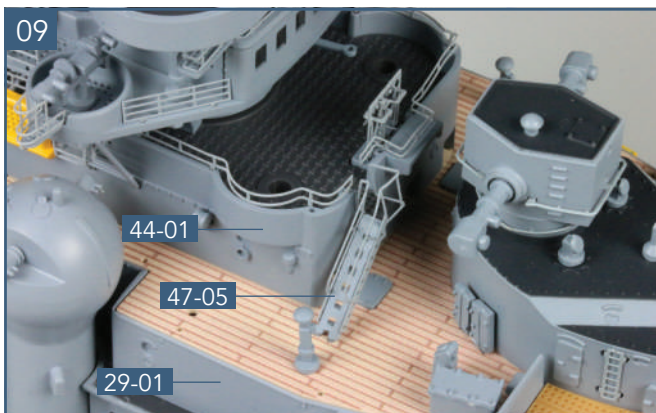
Position the upper decks of the superstructure on the lower mast deck with the cables running through the central hole. This is a tight-fitting connection, but you may use a little superglue if preferred.



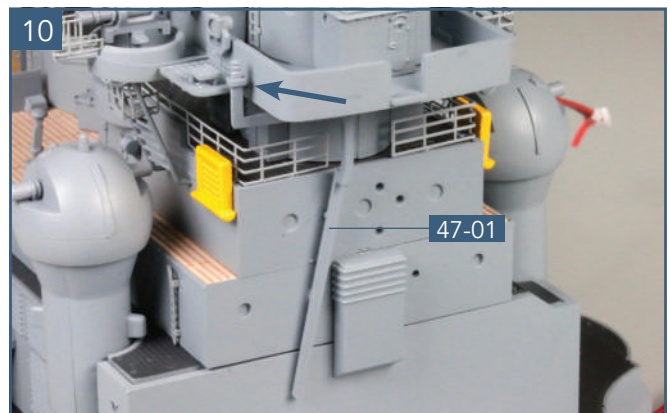
Cut the two ladder sides and railings **A-2** and **A-3** from frame **47-08**. Bend the railings at their upper ends as shown here (see also step 8).



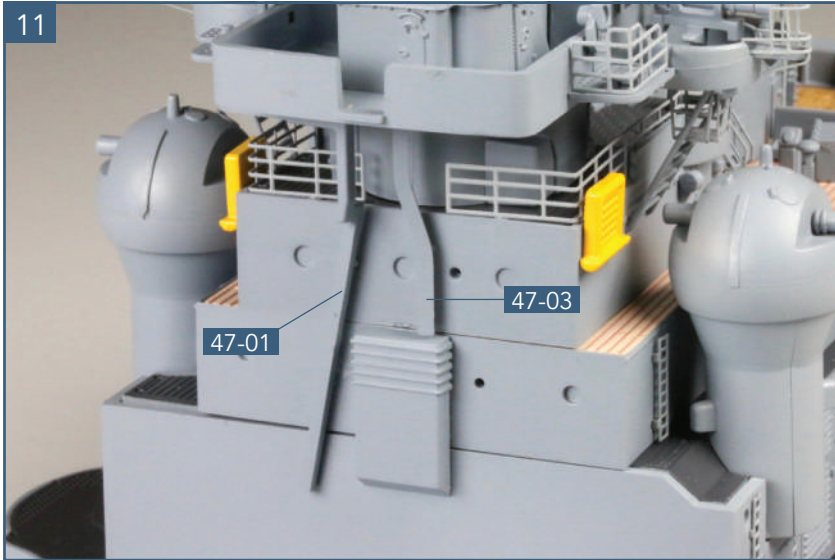
Fit the ladder sides and railings **A-2** and **A-3** on either side of the ladder **47-05**, so that the pegs on each side of the ladder are located in holes in the ladder sides. When you are happy with the fit, glue in place.



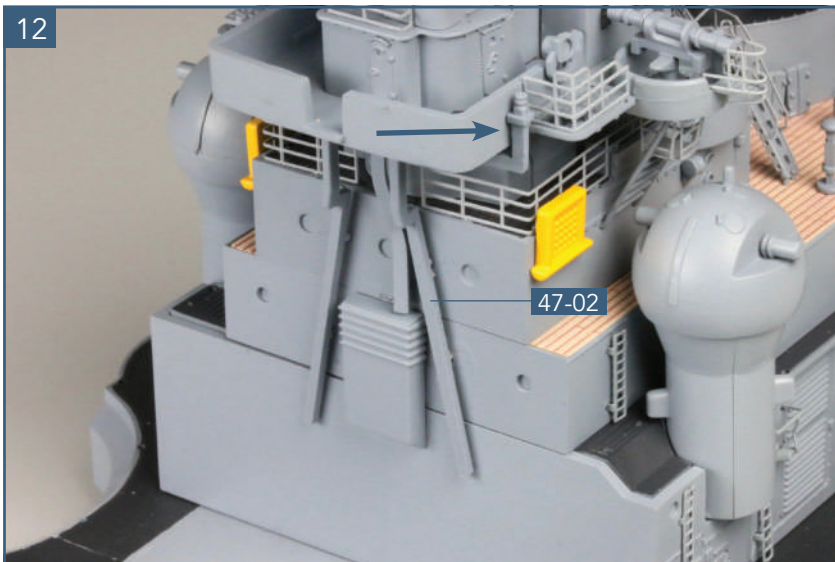
Identify the position for the ladder **47-05**, which leads up from the lower mast deck **29-01** to the upper mast deck **44-01**. Glue the base of ladder to the decking and the railings to the sides of the upper mast deck.



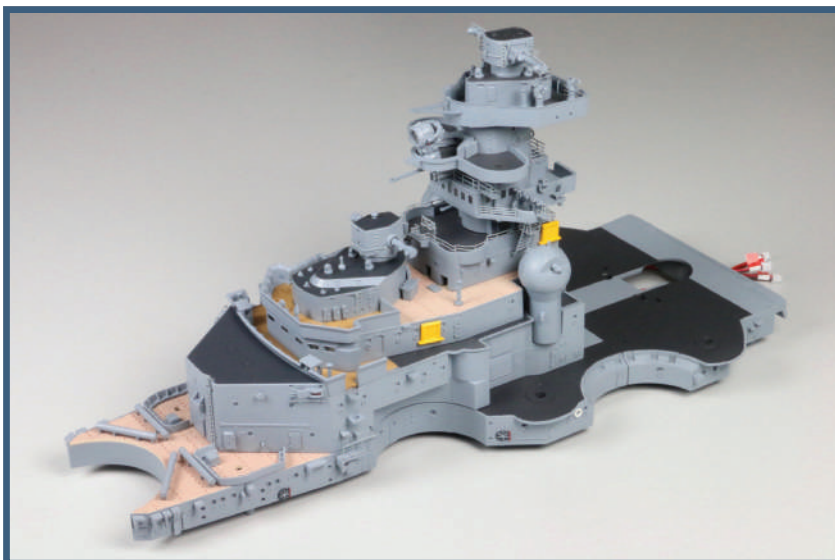
Check the fit of the port pipe **47-01** at the rear of the superstructure. The upper end of the pipe bends outwards so that the tip is on the outer edge of the admiral's bridge (arrow). Apply a little superglue to the two pegs on the pipe and glue in place.



The middle pipe **47-03** fits up the centre of the back of the superstructure. Apply a little superglue to the two pegs on the pipe and glue in place.



Check the fit of the starboard tube **47-02** on the starboard side of the rear of the admiral's bridge (arrow). Apply a little superglue to the two pegs on the pipe and glue in place.

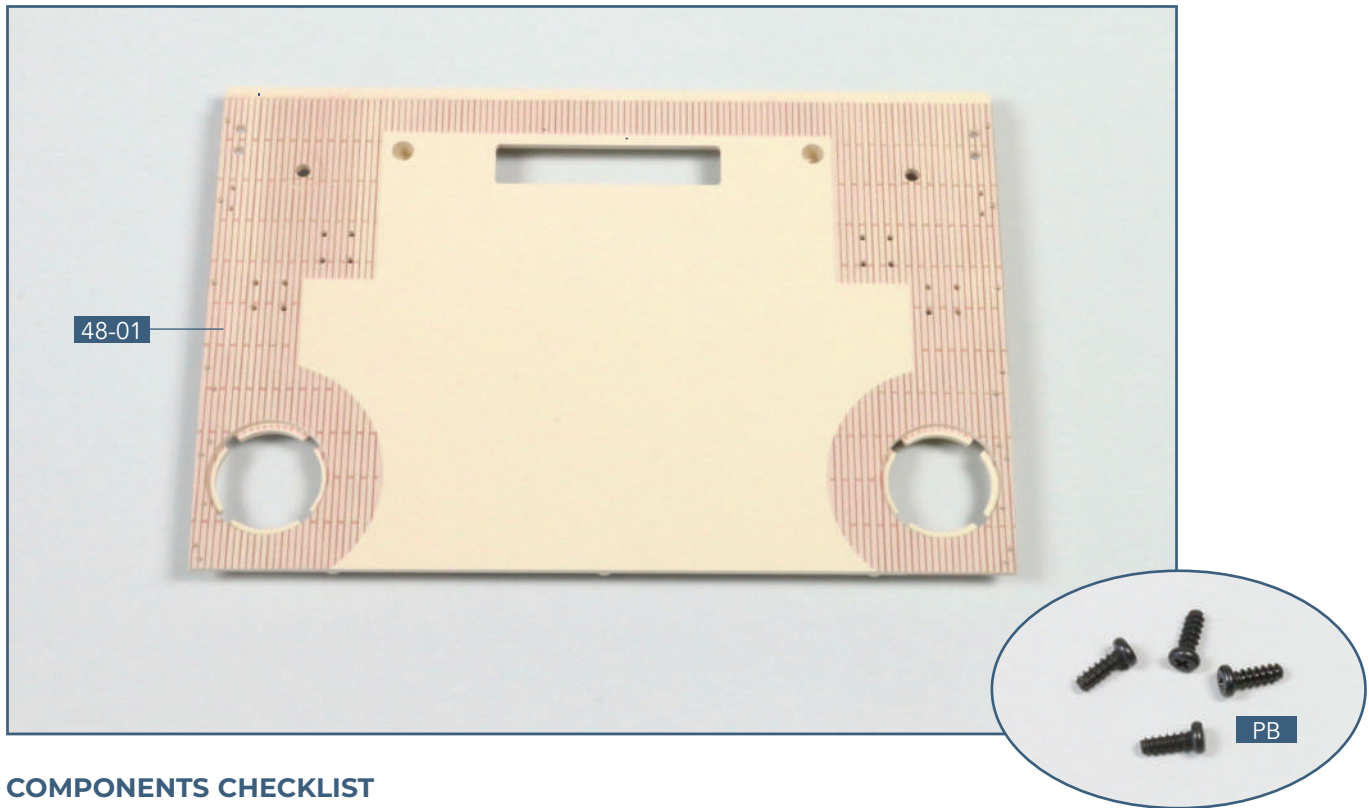


Completed work

The forward superstructure has been assembled and railings, rails and ladders have been fitted.

STAGE 48

THE NEXT SECTION OF THE UPPER DECK

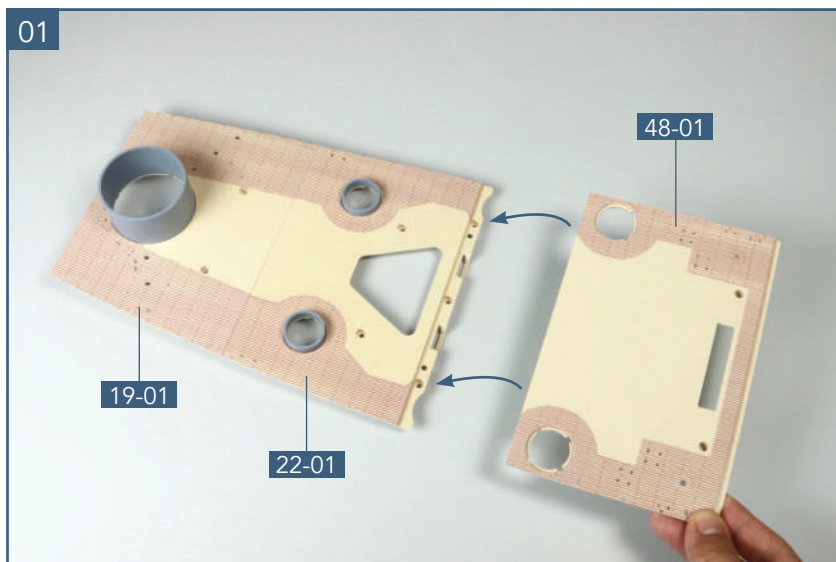


COMPONENTS CHECKLIST

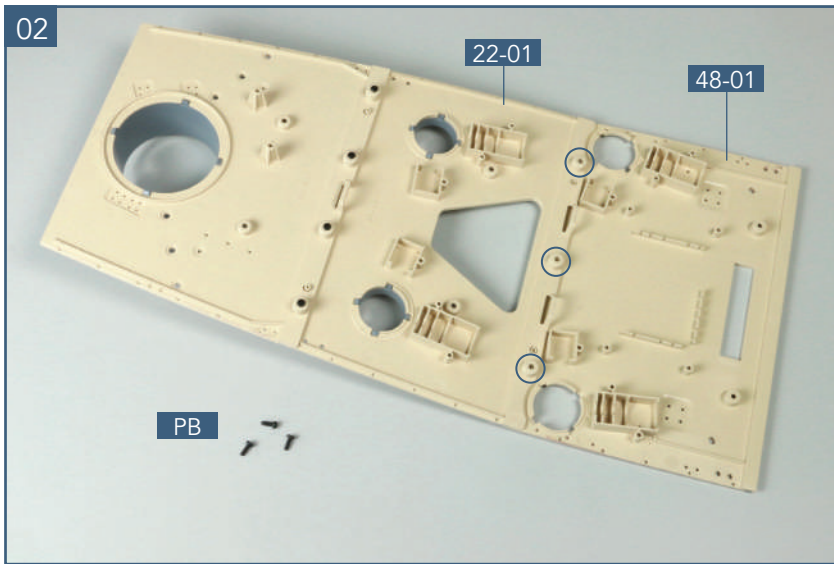
48-01: The fifth section of the upper deck

PB: Four 2.3 x 6mm CP screws

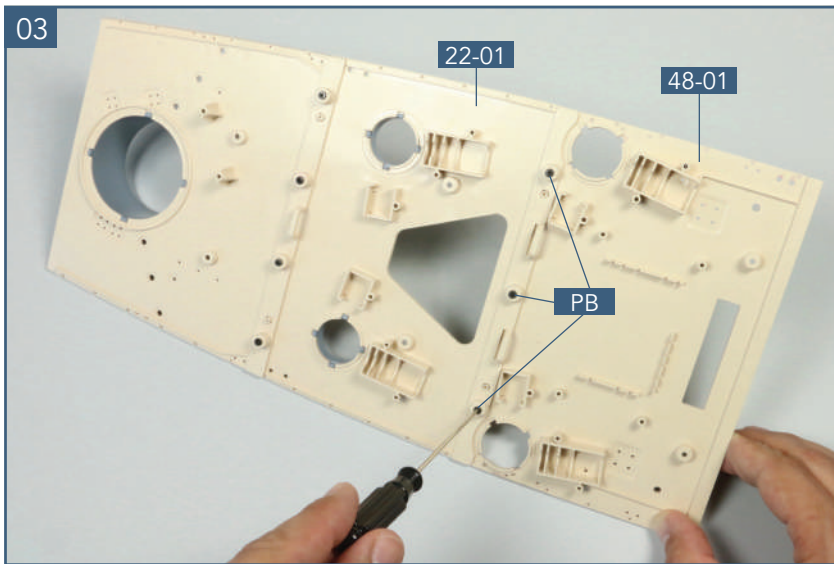
01. FITTING THE NEXT SECTION OF THE UPPER DECK



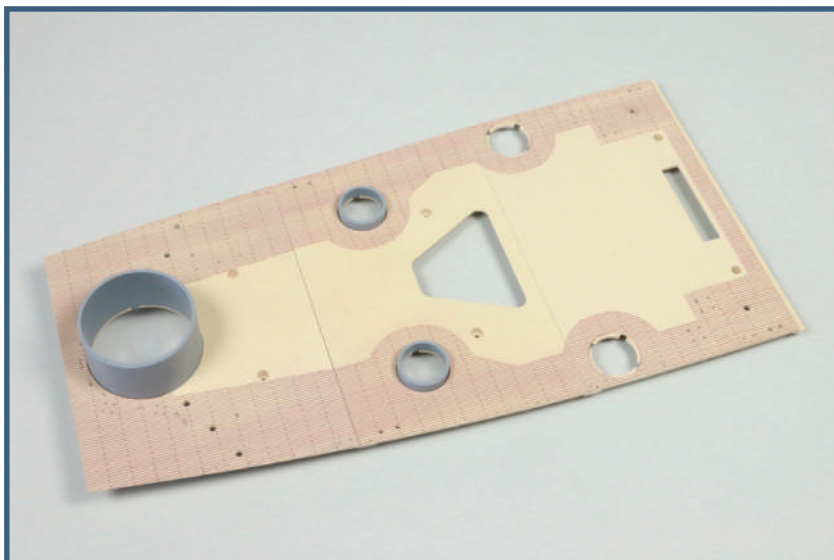
Take the upper deck assembly from stage 22 and place it on your work surface. Take the fifth upper deck section **48-01** and fit the forward edge over the lip in the aft edge of part **22-01**.



Carefully turn the assembly over and have three **PB** screws ready. Check that the screw holes (circled) are still fitting together properly.



Fix deck section **22-01** to deck section **48-01** with three **PB** screws.



Completed work

The fifth section of the upper deck has been fitted to the upper deck assembly.

STAGE 49 THE NEXT SECTION OF HULL

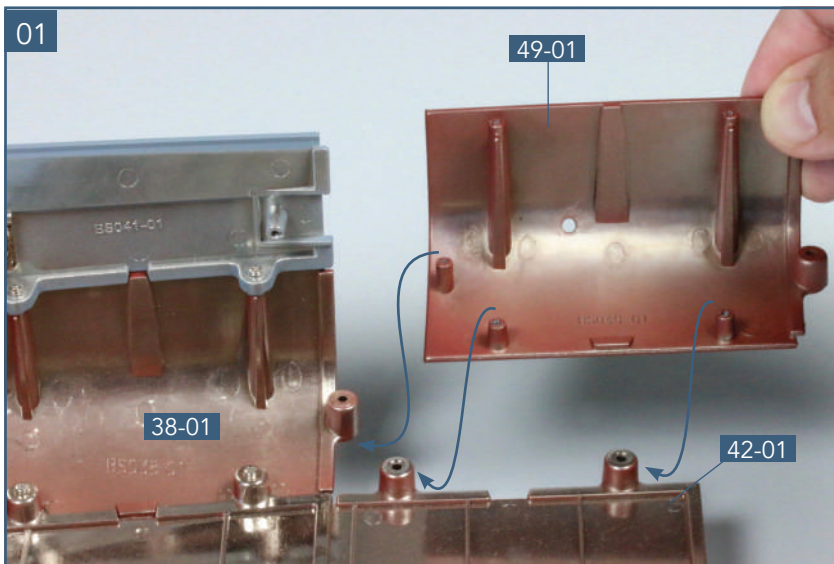


COMPONENTS CHECKLIST

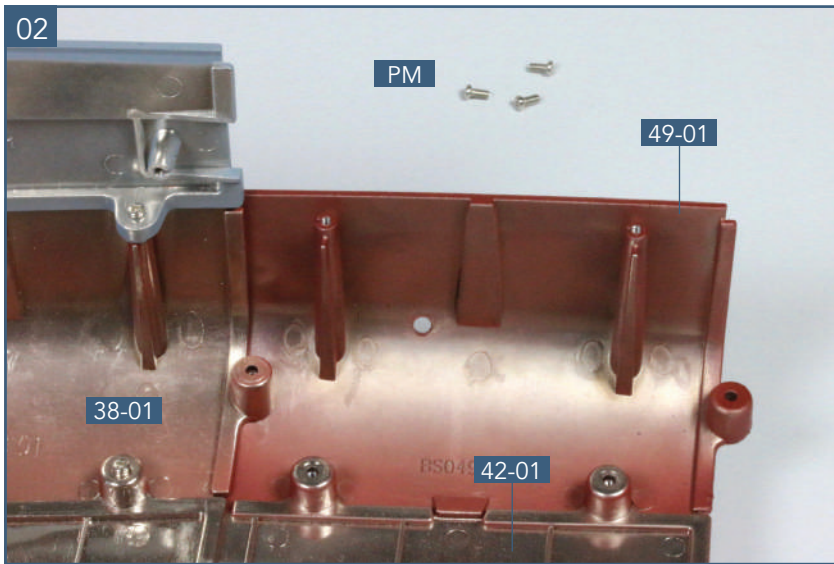
49-01 Lower starboard hull section

PM Four PM 2 x 4mm screws (1 spare)

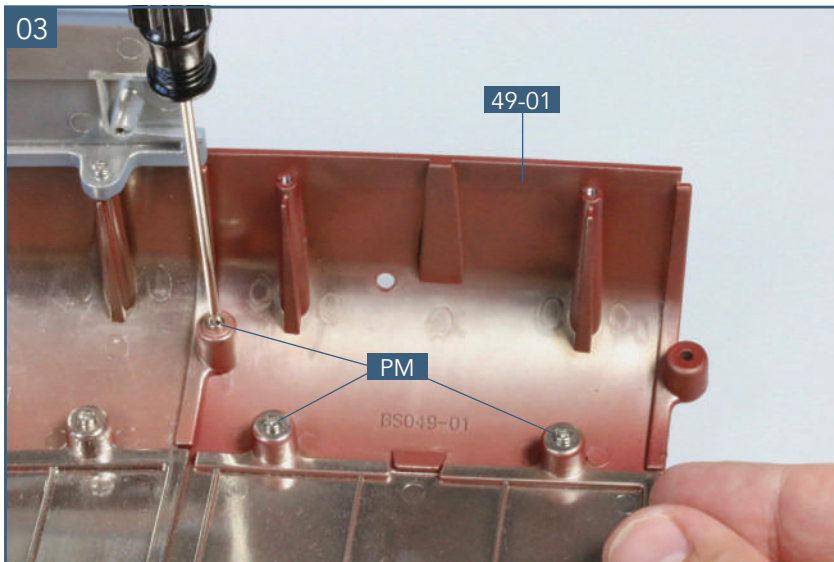
01. FITTING THE HULL SECTION



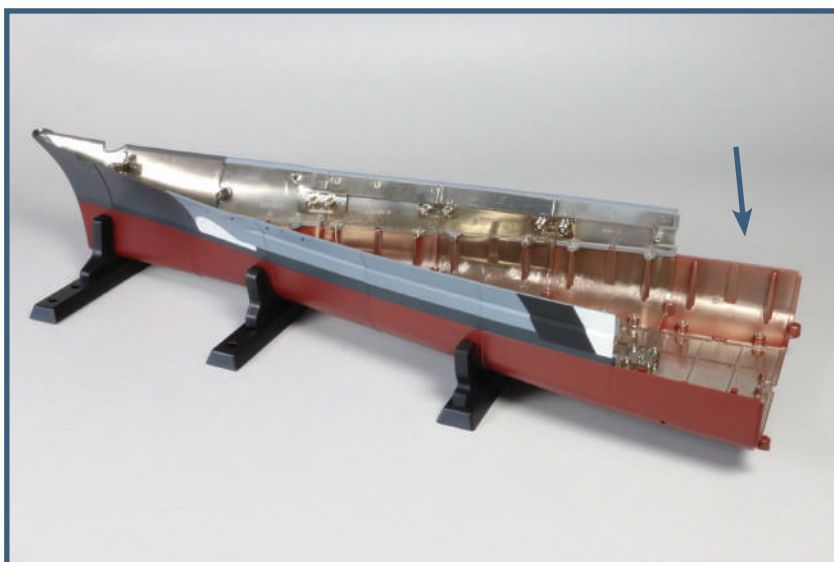
Take the hull assembly from stage 46. Take the lower starboard hull section **49-01** and fit it against the starboard side of the sixth keel section **42-01**, as indicated. The raised sockets on hull section **49-01** fit up into the sockets on the keel section **42-01** and the hull section **38-01**.



This shows the hull section **49-01** fitted in place. You will need three **PM** 2 x 4mm screws.



Fix part **49-01** in place with three **PM** 2 x 4mm screws.

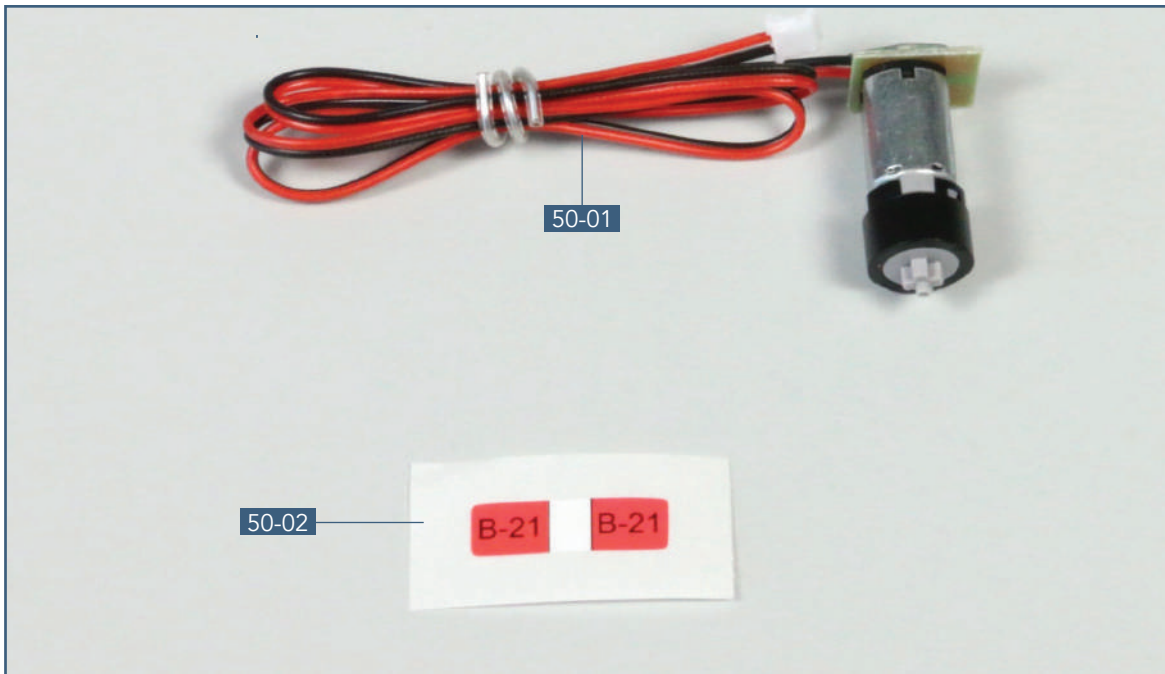


Completed work

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

STAGE 50

A MOTOR FOR THE SECOND 38CM TURRET

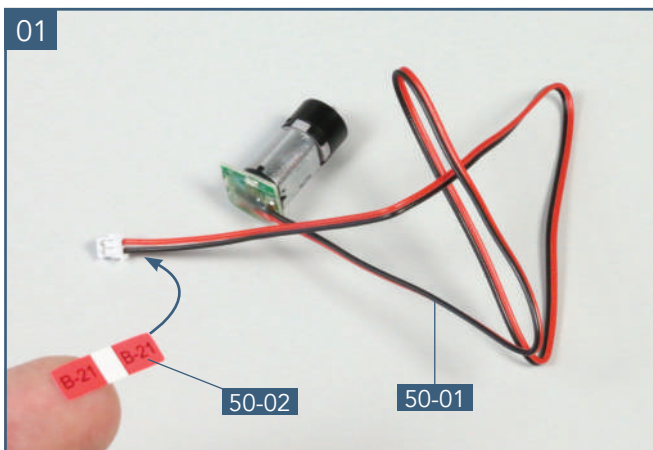


COMPONENTS CHECKLIST

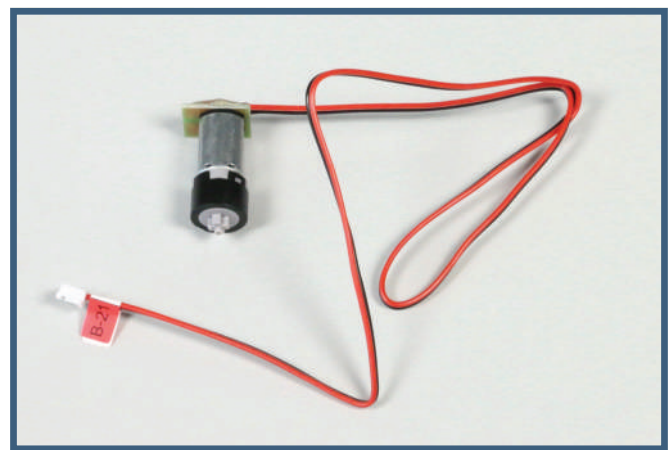
50-01 Electric motor

50-02 Cable label

01. FITTING THE CABLE LABEL



Place the motor **50-01** on your work surface. Take the cable label **50-02** and wrap it around the end of the cable, close to the connector.



Completed work

A label has been attached to the cable of the motor for the second 38cm twin turret. Store the motor safely and take care to avoid damaging the wires.

STAGE 51

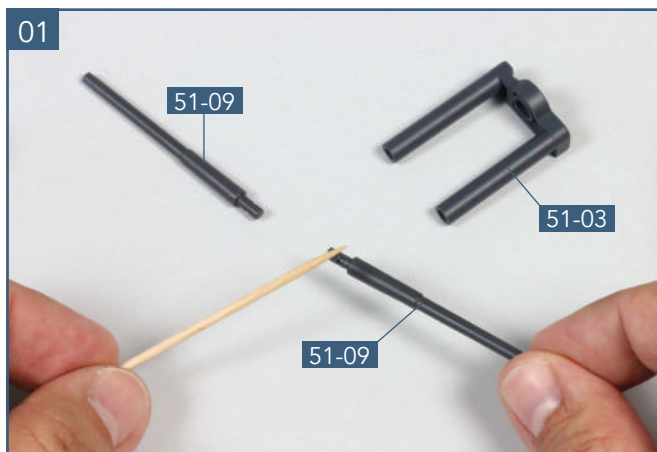
THE SECOND 38cm GUN TURRET



COMPONENTS CHECKLIST

- | | | |
|---------------------------------------|-------------------------------------|------------------------------------|
| 51-01 Revolving turret housing | 51-05 Cradle with base plate | |
| 51-02 Base plate of the turret | 51-06 Clutch shaft | 51-09 Two gun barrels |
| 51-03 Connector for barrels | 51-07 Motor mounting (lower) | 51-10 Tension spring |
| 51-04 Motor mounting (upper) | 51-08 Ring | PB Eleven 2 x 5mm PB screws |

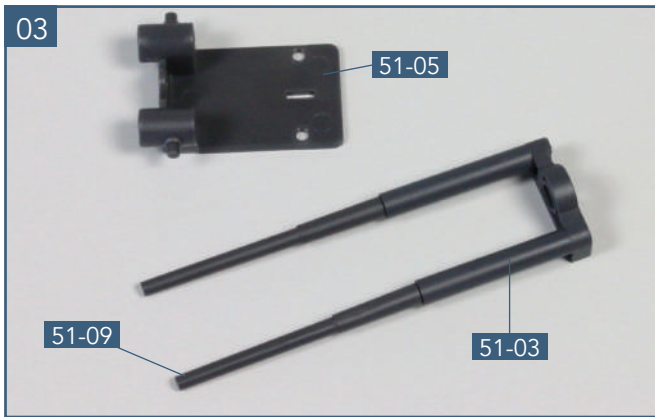
01. THE FRICTION CLUTCH



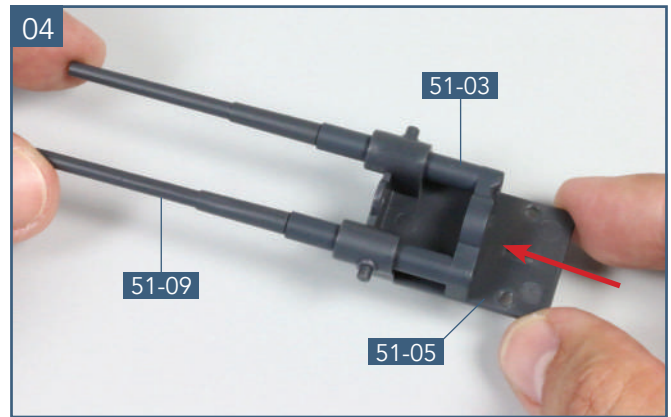
Place the connector **51-03** and the two barrels **51-09** on your work surface. Apply a little superglue to the peg on the end of one of the barrels, as shown.



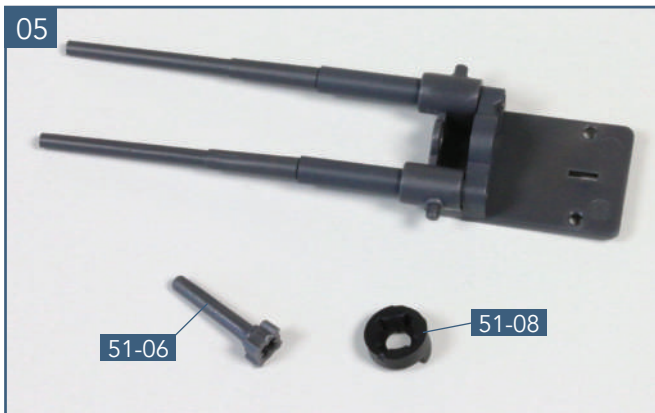
Fix the first barrel **51-09** into one side of the connector **51-03**, as shown.



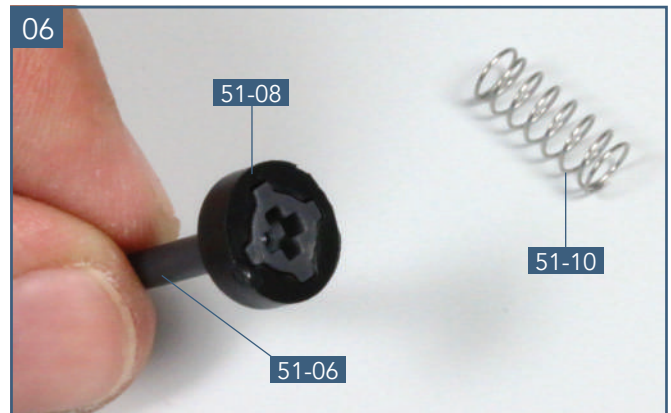
Glue the second gun barrel **51-09** into the connector **51-03** in the same way and allow to dry. Place the cradle **51-05** on your work surface.



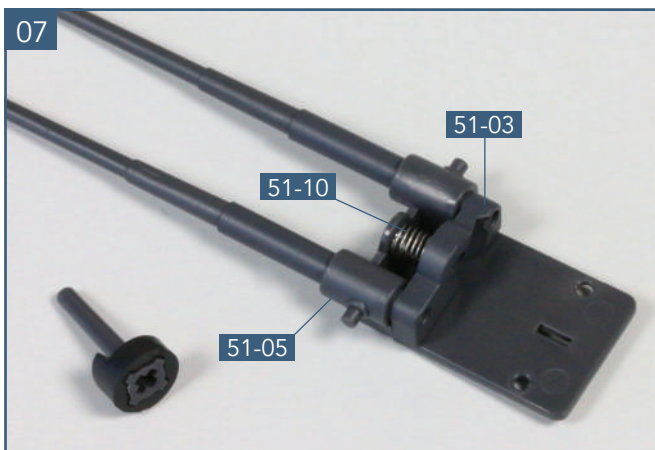
Slide the gun barrel assembly into the cradle **51-05** from the rear, as indicated by the arrow.



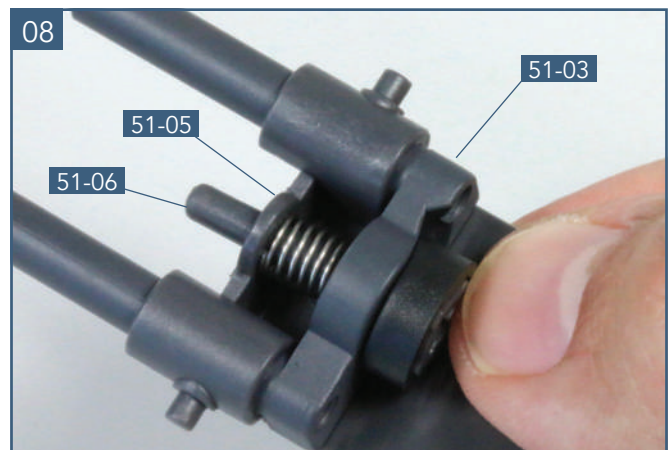
Push the gun barrels into the cradle **51-05** as far as they will go. Place the clutch shaft **51-06** and the ring **51-08** on your work surface.



Fit the shaft of part **51-06** into the ring **51-08**. Ensure the parts are aligned as shown here. Place the tension spring **51-10** on your work surface.

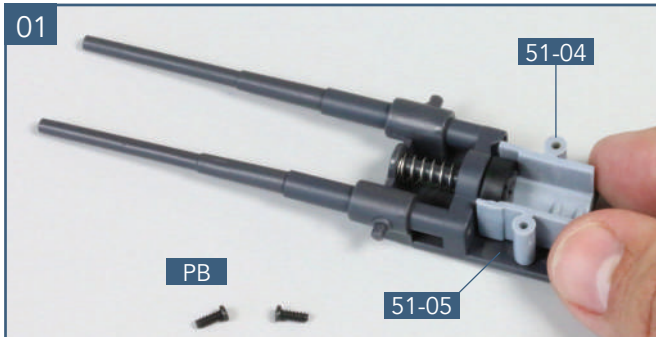


Compress the spring **51-10** and fit it between the cradle **51-05** and the gun barrel connector **51-03**.

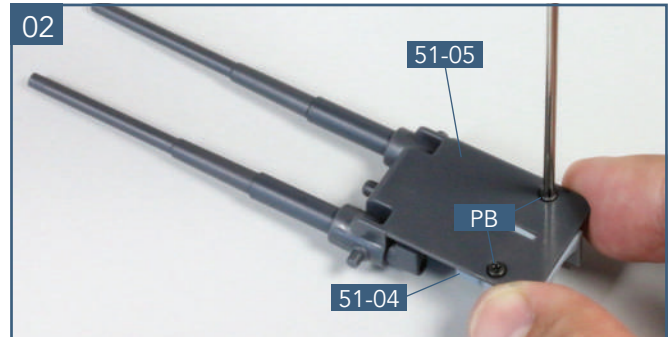


Fit the shaft of part **51-06** through the central hole of the connector **51-03**, through the tension spring **51-10** and through the cradle **51-05**.

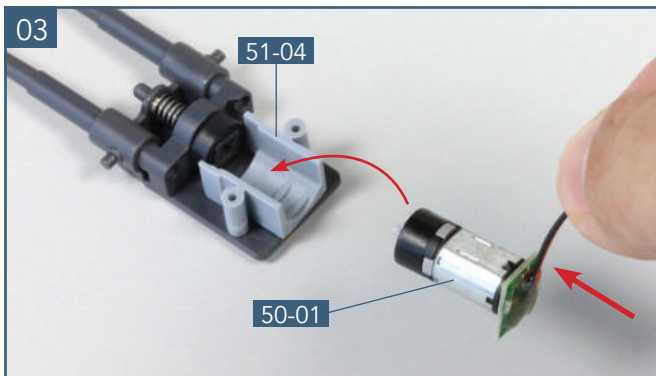
02. FITTING THE 38cm GUN MOTOR



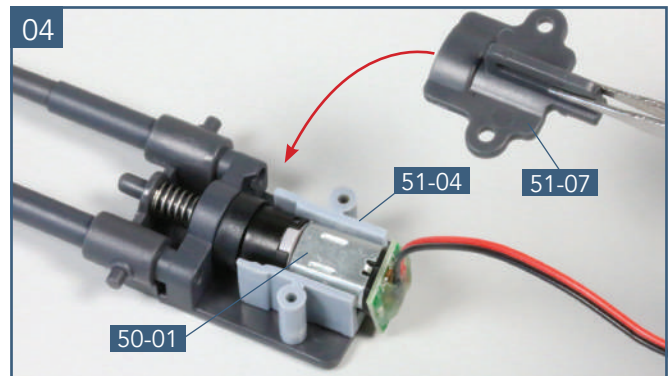
Take two **PB** screws. Fit the upper part of the motor housing **51-04** on the base plate of the cradle **51-05** as shown.



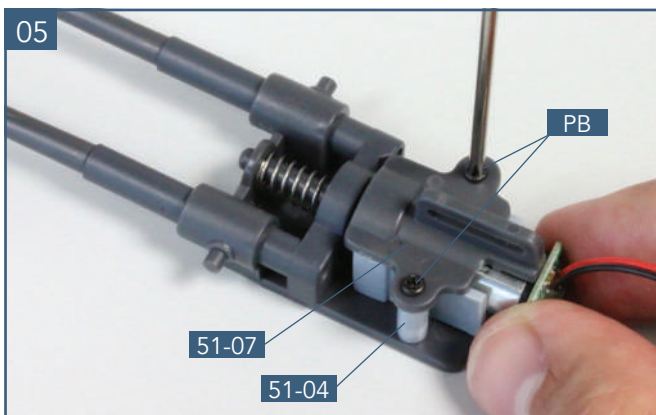
Turn the assembly over and fix the upper part of the motor housing **51-04** to the base plate of the cradle **51-05** with two **PB** screws.



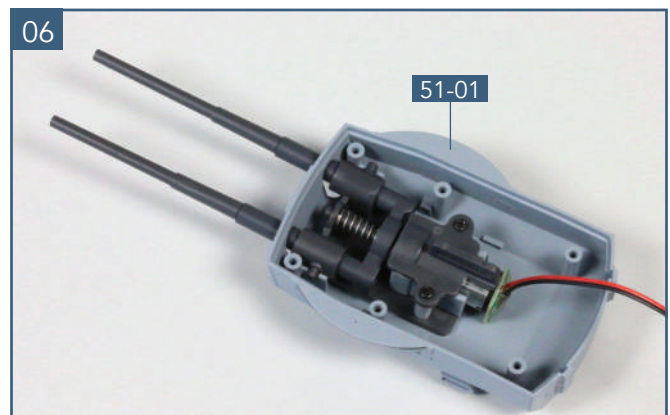
Turn the assembly over again and fit the motor **50-01** (from the previous stage) into the upper part of the housing **51-04**. Ensure that the cables from the circuit board are away from the base plate of the cradle, as indicated by the arrow.



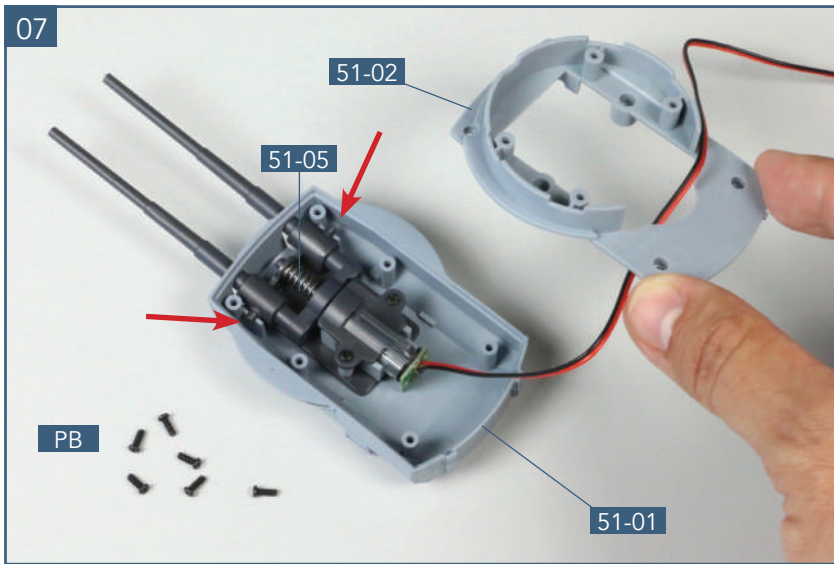
With the motor correctly fitted, take the lower part of the motor housing **51-07** and fit it over the motor so that the screw holes align with those on the upper part of the motor housing **51-04**.



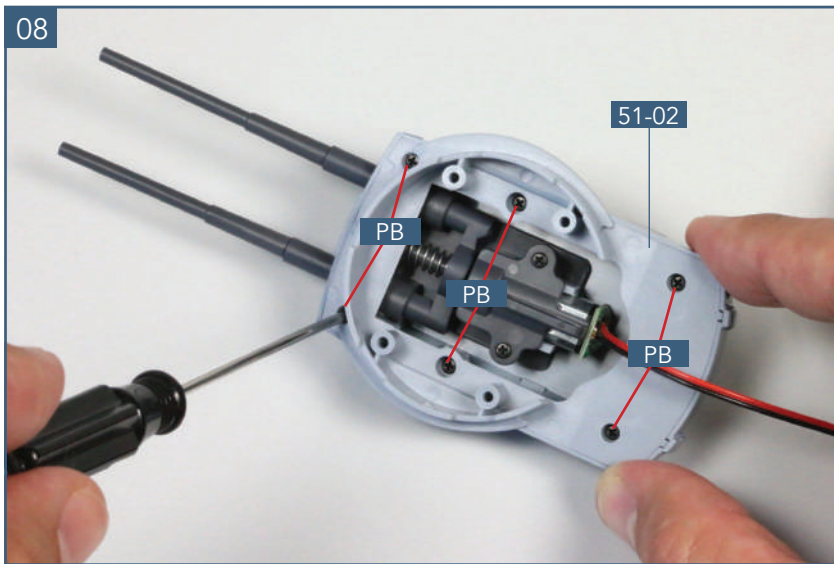
Fix the two parts of the motor housing (**51-07** and **51-04**) together with two **PB** screws.



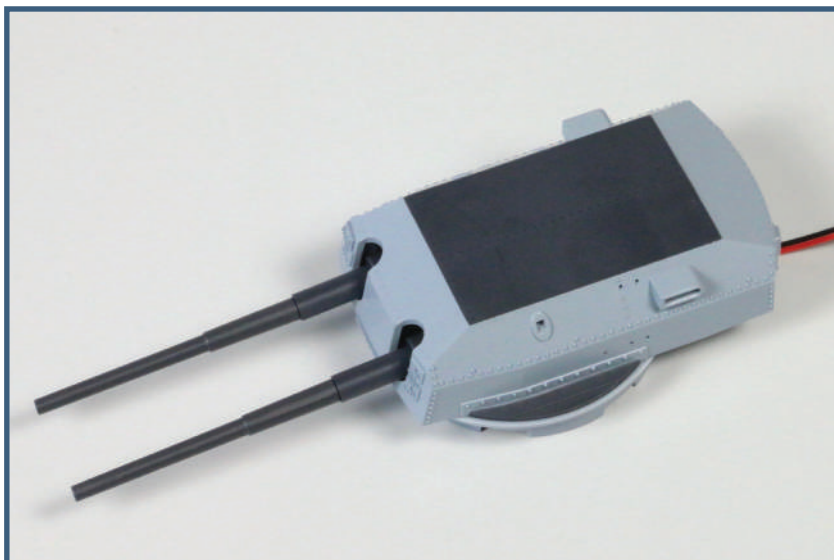
Fit the gun barrel assembly into the rotating gun housing **51-01**, feeding the barrels through the holes at the front of the housing.



Ensure that the pins on the sides of the cradle **51-05** fit between the raised lugs on the inside of the turret housing **51-01** (arrows). Feed the cable through the base plate of the turret **51-02** and fit the base plate over the upper part of the turret housing **51-01** so that the screw holes are aligned.



Fix the base plate of the turret **51-02** to the turret housing **51-01** with six **PB** screws (indicated by the red lines).

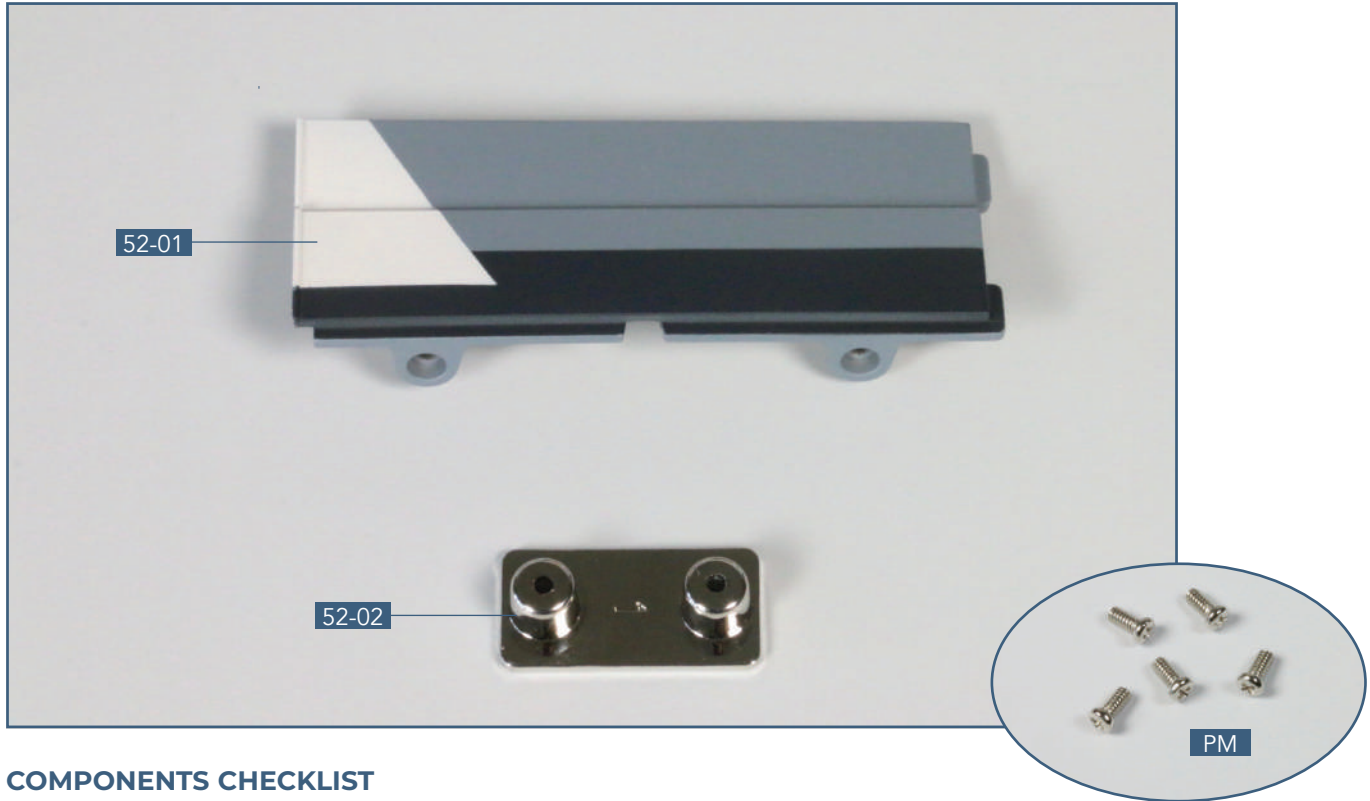


Completed work

The first stage of assembly of the second 38cm gun turret has been completed. Further details will be added at a later stage, and the turret will be fitted to the upper deck.

STAGE 52

THE NEXT HULL SECTION



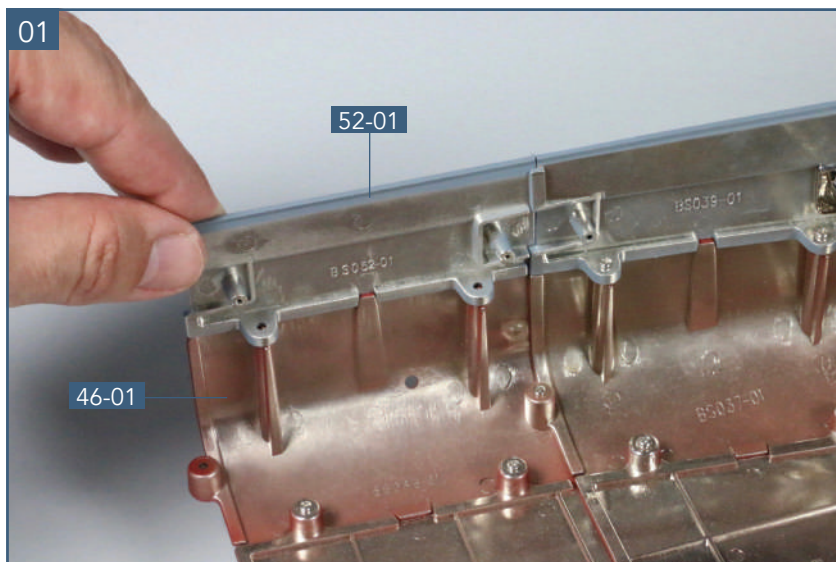
COMPONENTS CHECKLIST

52-01: Upper port hull section

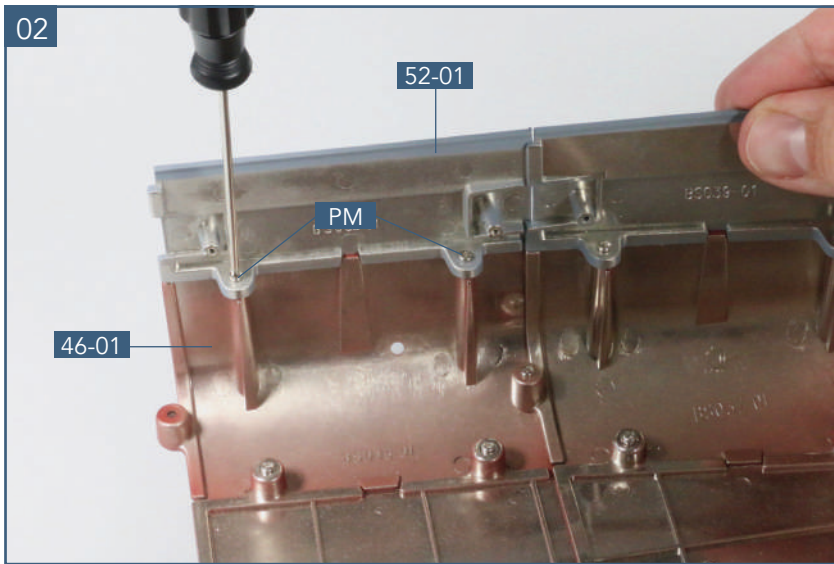
52-02: Connector

PM: Five 2 x 4 mm PM screws

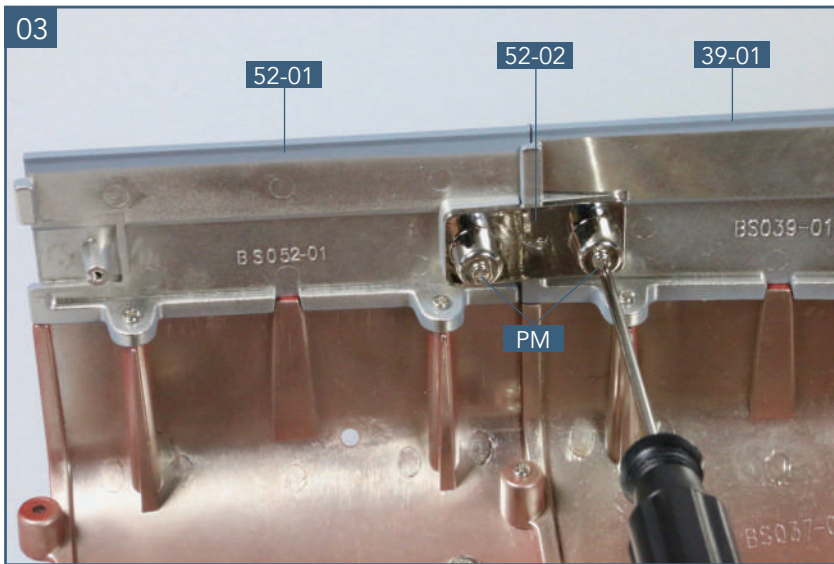
01. FITTING THE HULL SECTION



Place the hull assembly on your worktop so that you have access to the port side. Take the upper port hull section **52-01** and position it above the lower port hull section **46-01**. Ensure that the screw holes are aligned as shown.



Fix the hull section **52-01** to section **46-01** with two **PM** screws as shown in the photo.



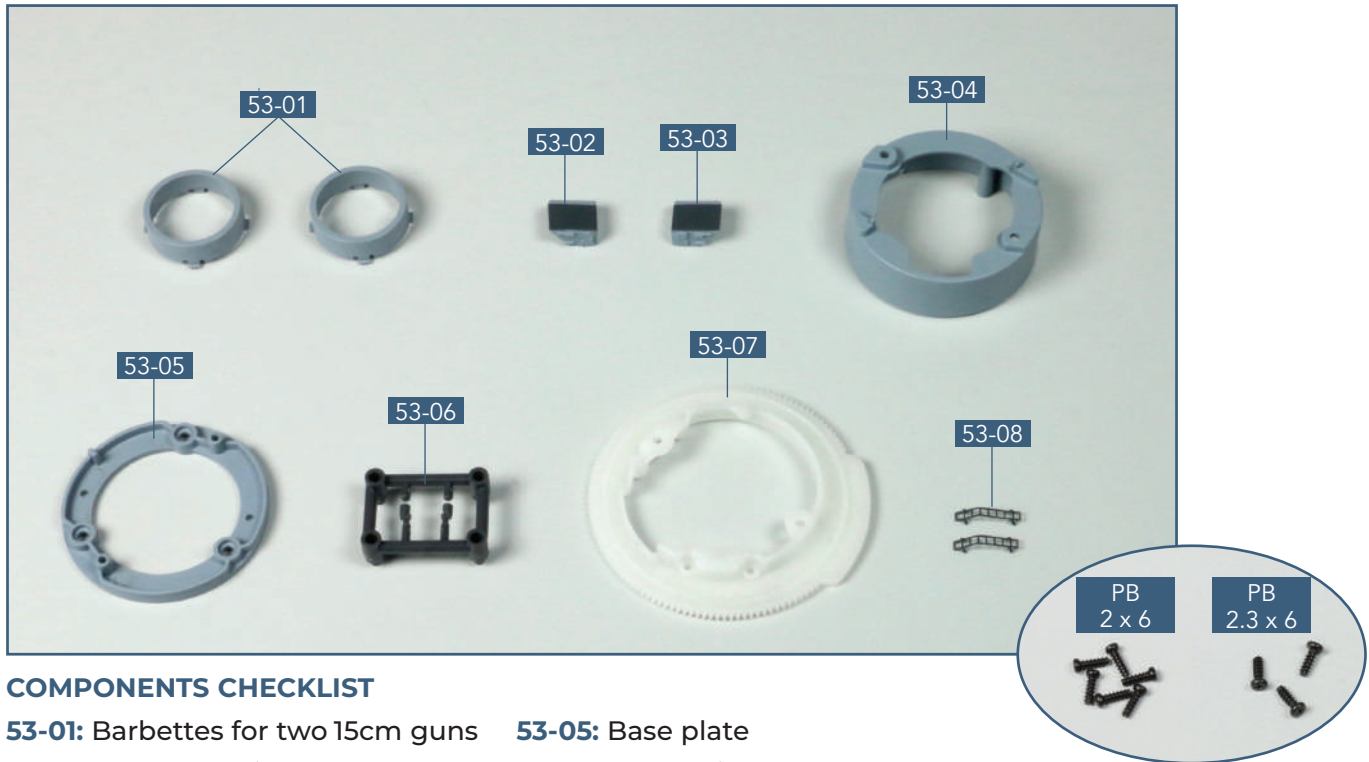
Fit the connector **52-02** on the raised screw sockets of the upper port hull sections **52-01** and **39-01**. Fix the connector in place with two **PM** screws.



Completed work

Another section of hull has been fitted to the hull assembly.

STAGE 53 COMPLETING THE SECOND GUN TURRET

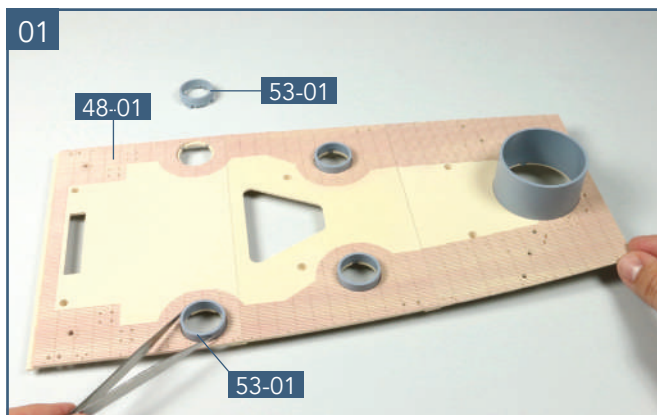


COMPONENTS CHECKLIST

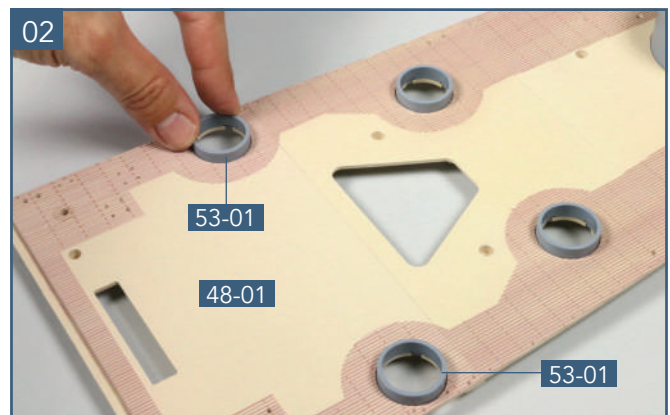
- 53-01:** Barbettes for two 15cm guns
- 53-02:** Port rangefinder hood
- 53-03:** Starboard rangefinder hood
- 53-04:** Base of 38cm gun turret
- 53-05:** Base plate
- 53-06:** Two periscopes
- 53-07:** Cog
- 53-08:** Two ladders

- PB:** Six 2 x 6 mm PB screws
- PB:** Three 2.3 x 6 mm PB screws

01. FITTING THE BARBETTES FOR THE NEXT TWO 15cm GUNS

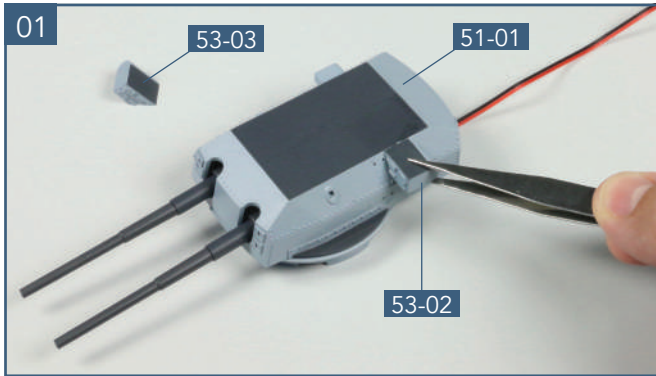


Take the upper deck assembly **19-01/22-01/48-01** from stage 48. Fit the first barrette **53-01** into the hole on the starboard side of deck section **48-01** as shown.

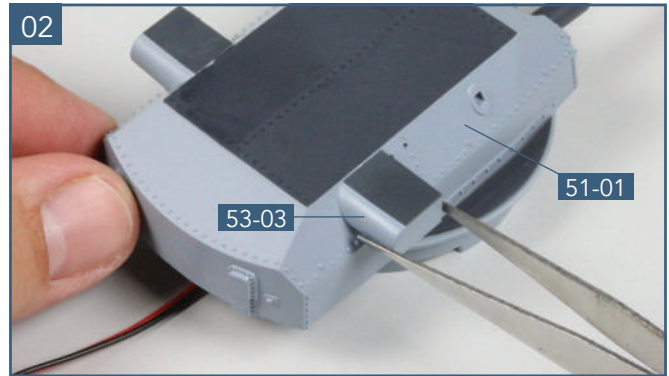


Fit the second barrette **53-01** into the hole on the port side of upper deck section **48-01** as shown.

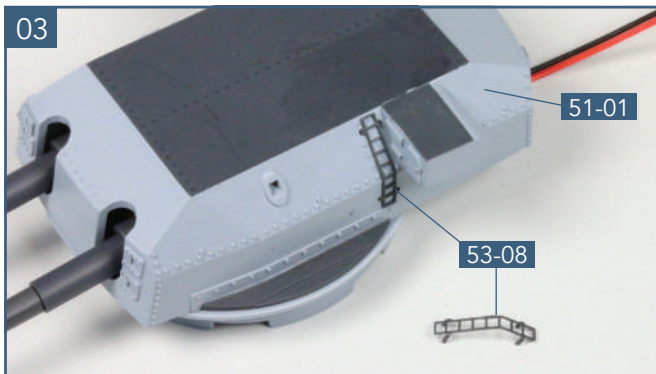
02. DETAILS FOR THE SECOND 38cm GUN TURRET



Check the fit of the port rangefinder hood **53-02** on the port side of the turret housing **51-01**. When you are happy with the fit, fix in place with a little superglue.



Fit the starboard rangefinder hood **53-03** on the opposite side of the turret housing **51-01** and glue in place as shown.



Take the first ladder **53-08** and fit the four pegs into the holes in the port side of the turret housing **51-01**. When you are happy with the fit, apply a little superglue to the pegs and fix in place.



In the same way, fix the second ladder **53-08** in place on the starboard side of the gun turret.

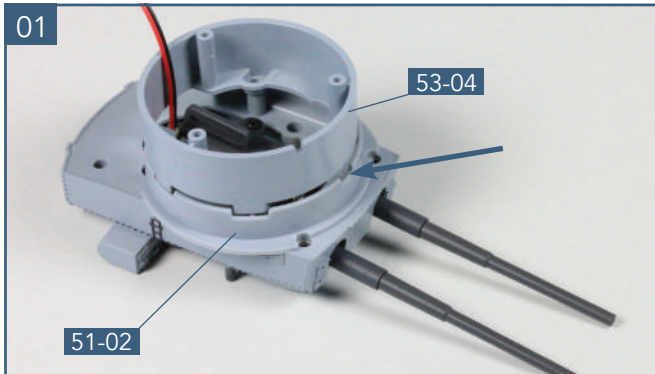


Cut the periscopes **53-06** from the frame. Fix the first one in place on the port side of the turret hood using a little superglue.

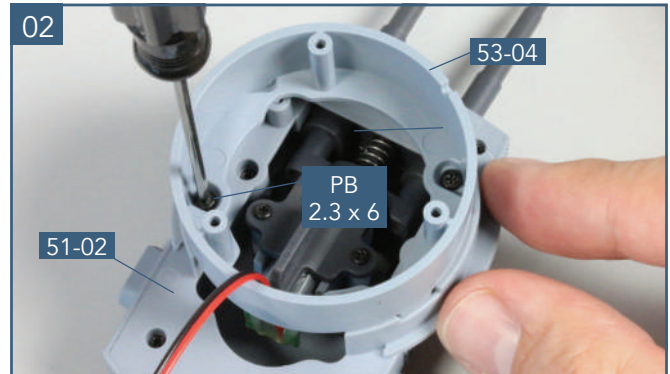


Glue the second periscope **53-06** in place on the other side of the turret hood.

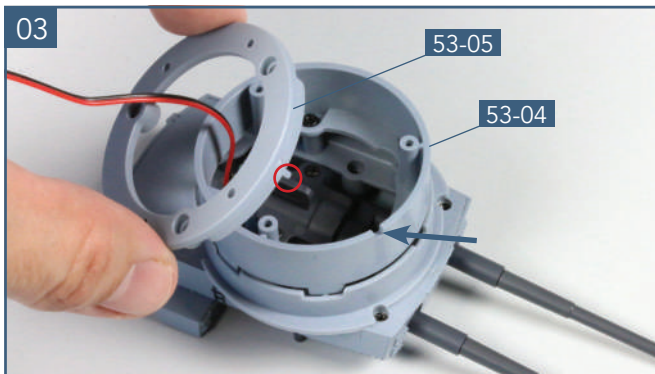
03. ASSEMBLING THE SECOND 38cm GUN TURRET



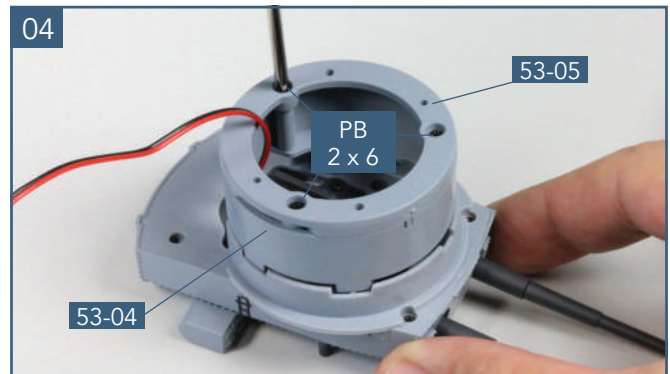
Turn the turret assembly upside down and fit the turret base **53-04** in place with the cable passing through it as shown. Note that the recess at the front of part **51-02** remains free (arrow).



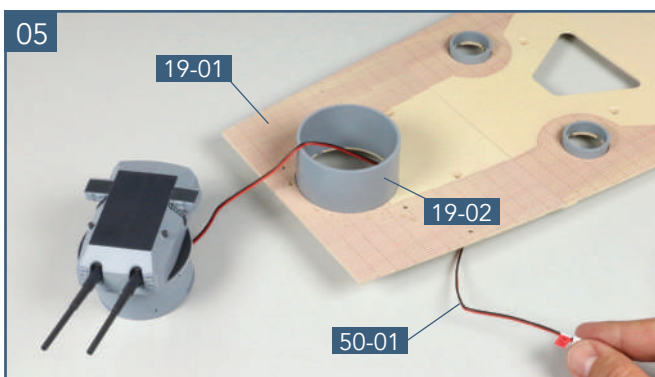
Fix the turret base **53-04** to part **51-02** with two 2.3 x 6mm **PB** screws.



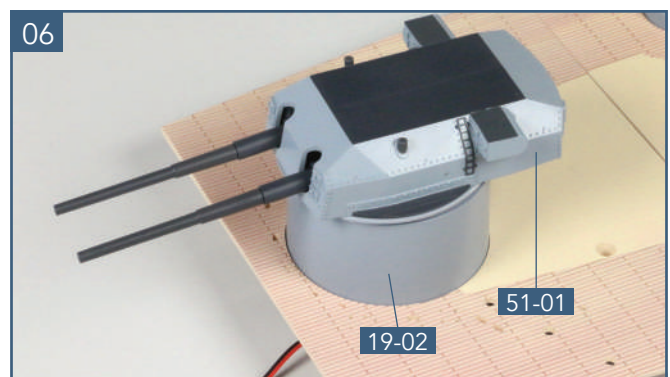
Take the base plate **53-05** and fit it on the base **53-04**, with the cable passing through it as shown. A small peg on part **53-05** (circled) fits into a recess in part **53-04** (arrow) to ensure correct alignment.



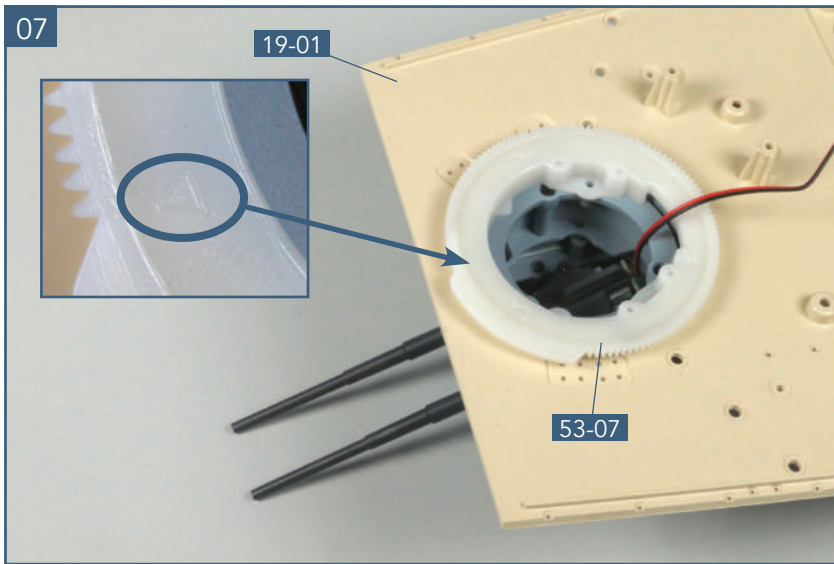
Attach the base plate **53-05** to part **53-04** with three **PB** 2 x 6mm screws.



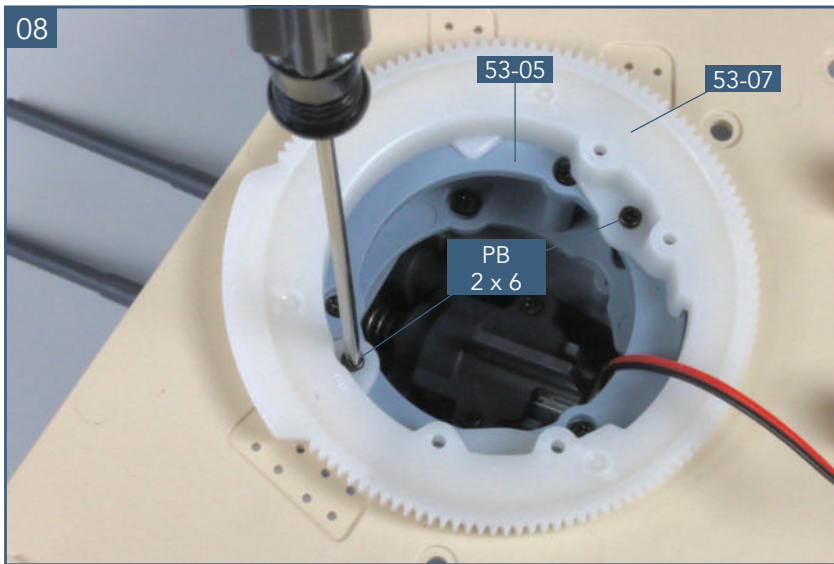
Take the upper deck structure **19-01/22-01/48-01** from the steps on page 27. Thread the cable from the motor **50-01** through the barrette **19-02**.



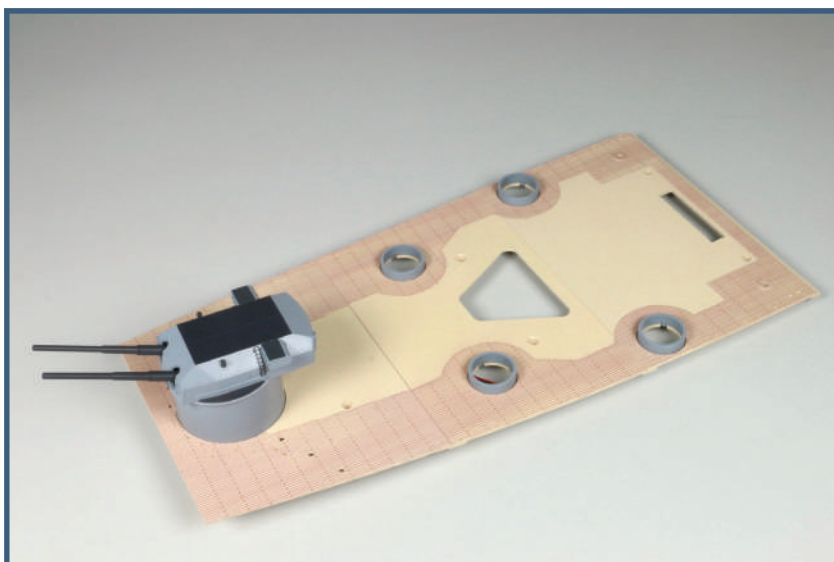
Position the second turret assembly **51-01** on the barrette **19-02** as shown.



Holding the gun turret in place, carefully turn the top deck structure over. Fit the cog **53-07** to the underside of the upper deck **19-01**. Note the alignment of the cog: there is a small triangle on the cog that should point towards the bow (inset).



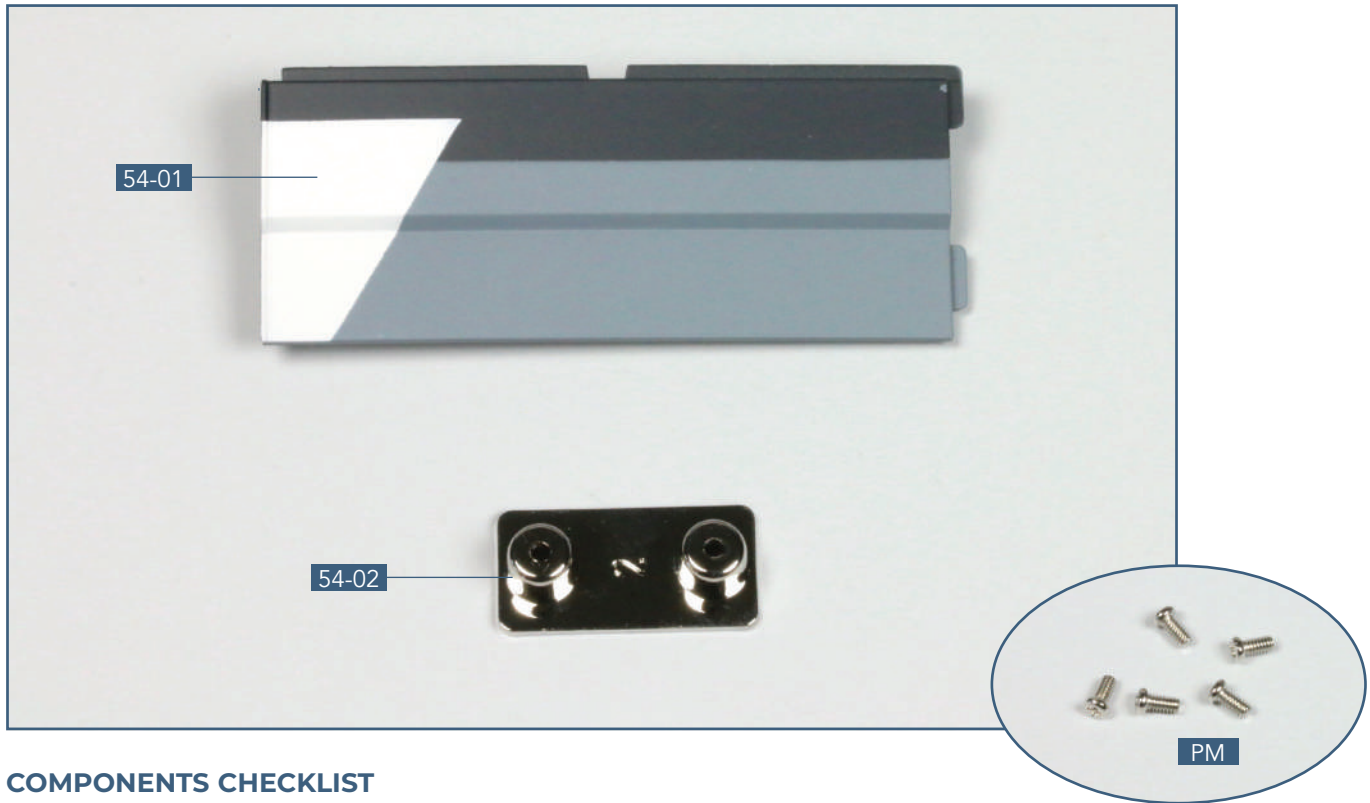
Identify the fixing points for the cog **53-07** and check that the screw holes are aligned with holes in the base plate **53-05**. Fix in place with two **PB 2 x 6** screws.



Completed work

The second 38cm twin gun turret has been completed and fitted in place on the upper deck. Two more barbettes have been added to the upper deck.

STAGE 54 THE NEXT HULL SECTION



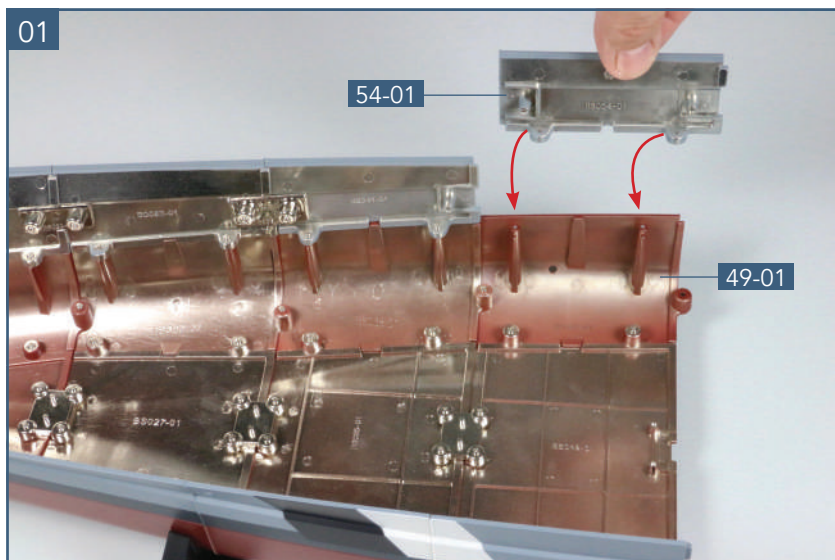
COMPONENTS CHECKLIST

54-01: Upper starboard hull section

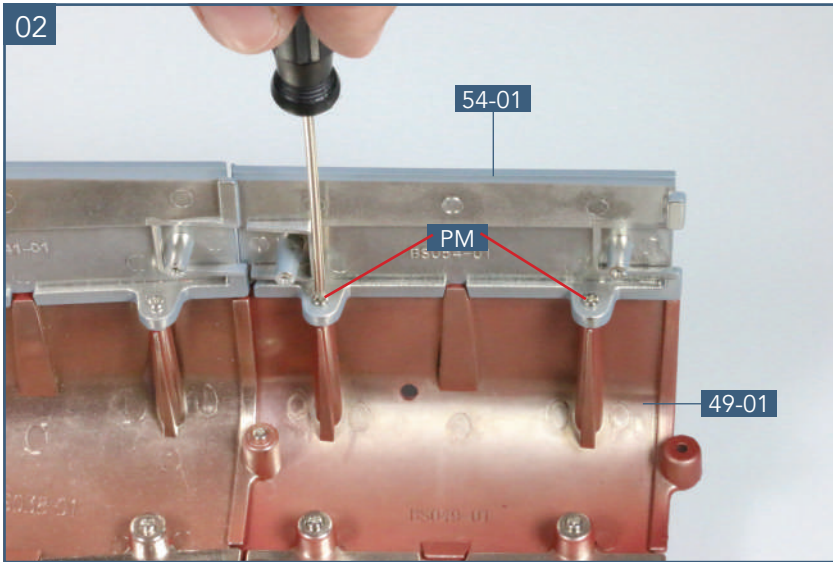
54-02: Connector

PM: Five 2 x 4mm PM screws

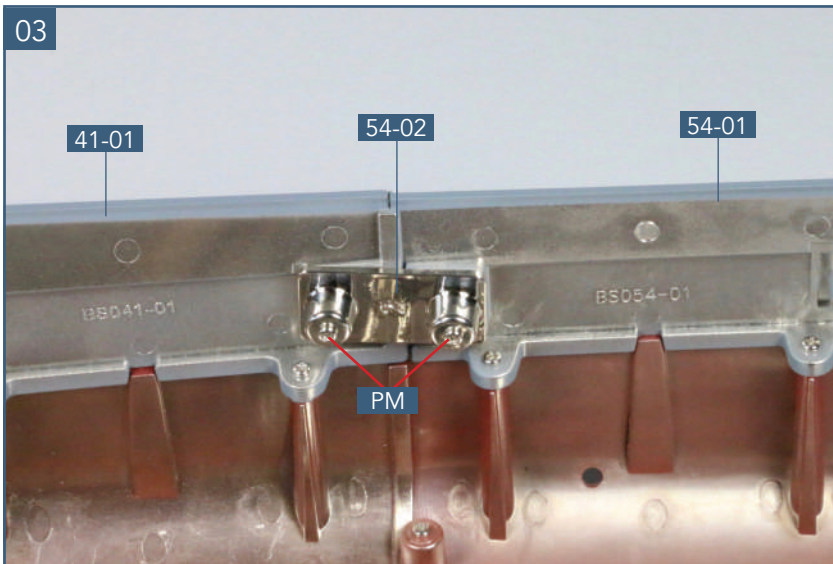
01. FITTING THE HULL SECTION



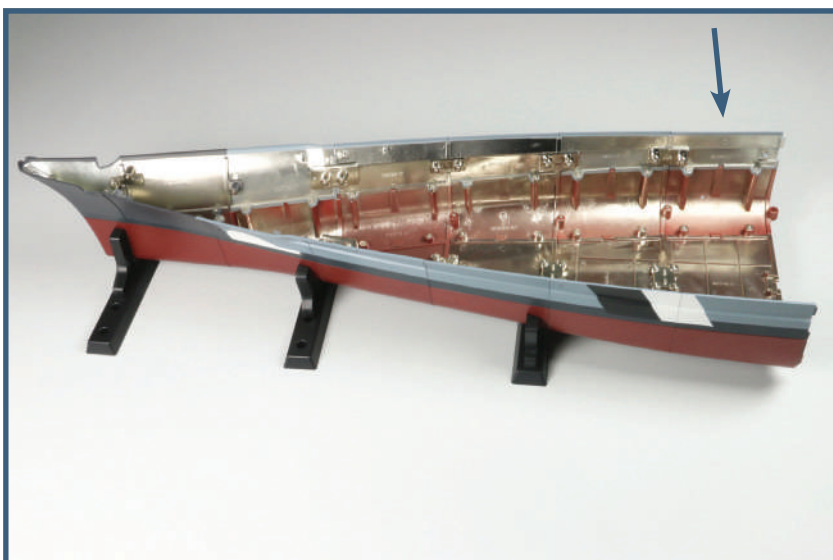
Take the hull assembly from stage 52 and place it on your worktop so that you have access to the starboard side. Take the upper starboard hull section **54-01** and fit it above the hull section **49-01**, as indicated by the arrows.



Fix the upper starboard hull section **54-01** to section **49-01** with two **PM** screws as shown in the photo.



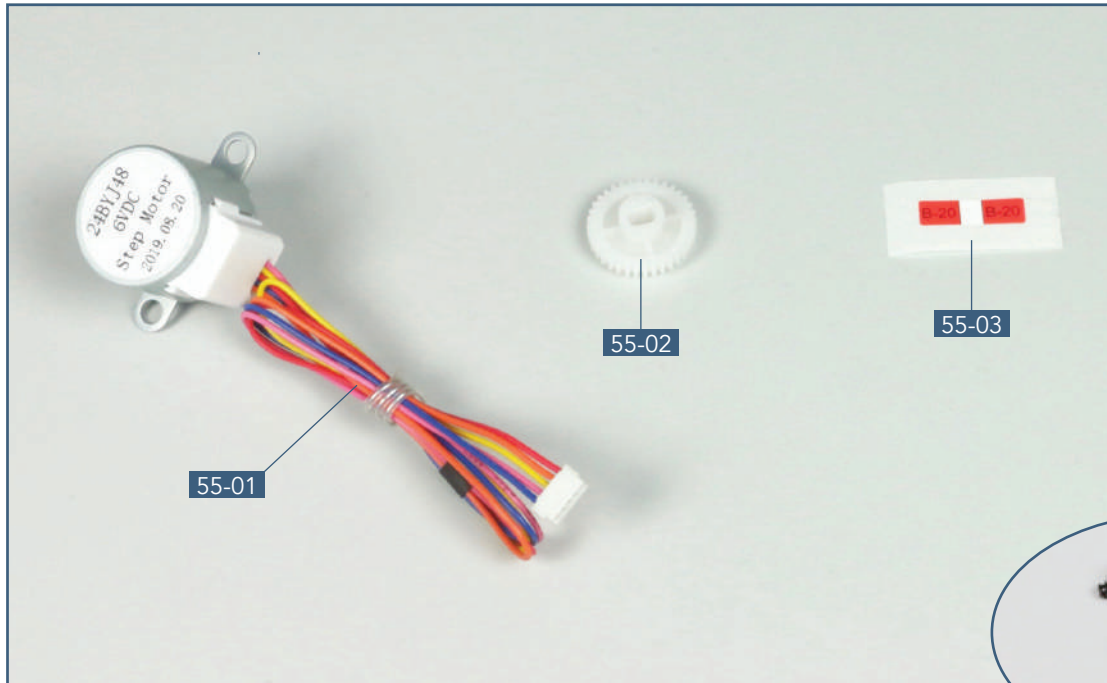
Fit the connector **54-02** over the raised screw sockets of the upper starboard hull sections **54-01** and **41-01**. Fix in place with two **PM** screws, as shown.



Another section has been fitted to the hull assembly.

STAGE 55

MOTOR FOR THE SECOND GUN TURRET



NOTE: The gun turret motor is a step motor, more commonly called a stepper motor, that controls the rotation of the turret in small steps.



COMPONENTS CHECKLIST

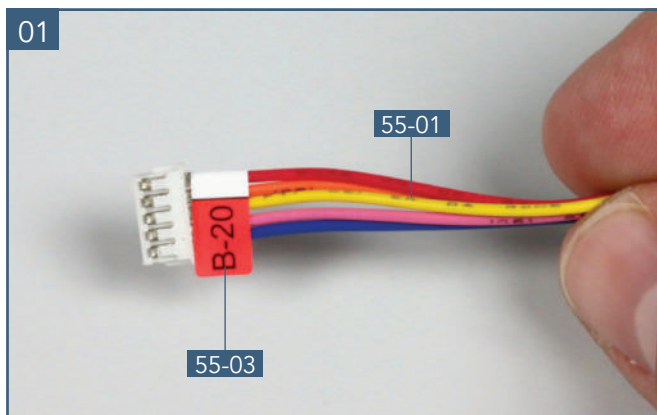
55-01: Gun turret motor

55-02: Cog

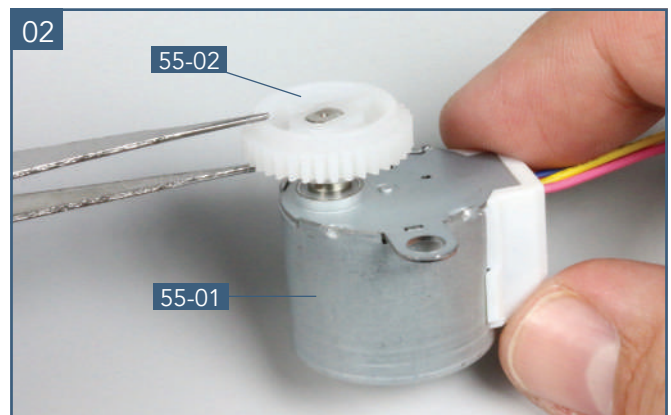
PWB: Three 2.3 x 5 mm PWB screws

55-03: Cable label

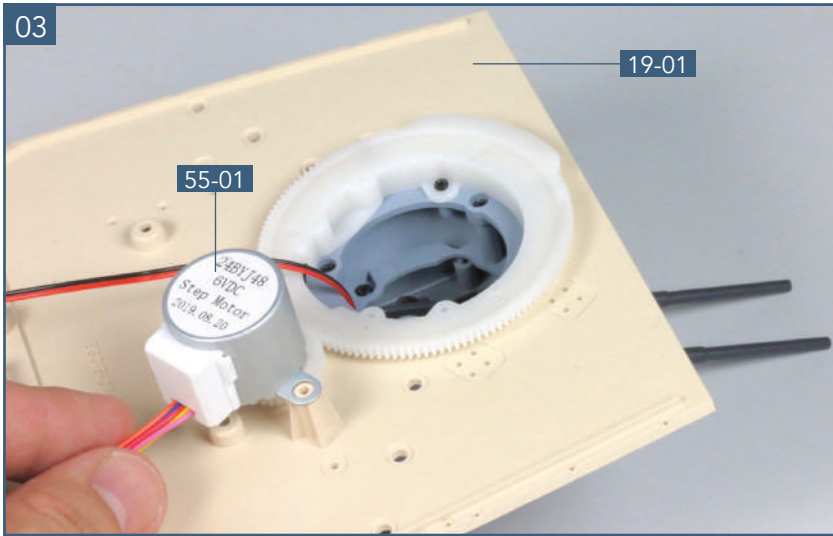
01. ASSEMBLING THE GUN TURRET MOTOR



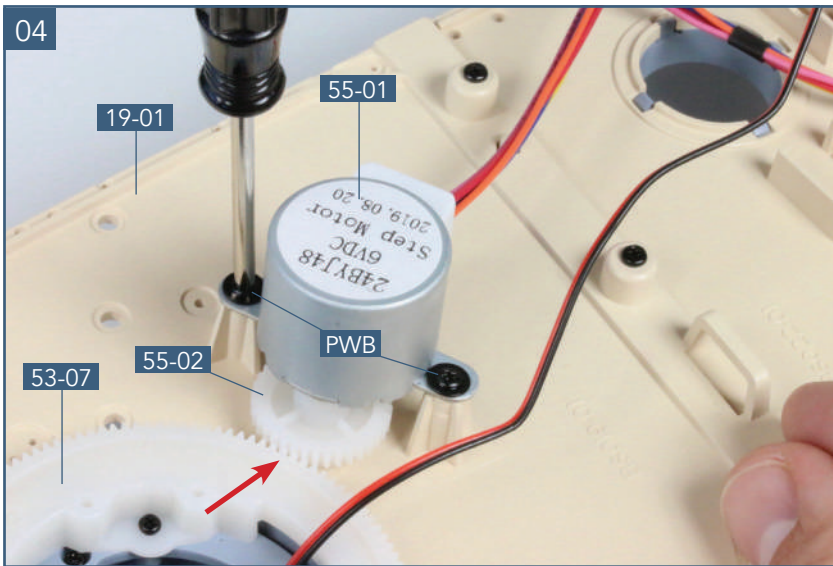
Attach the cable label **55-03** to the cable of the motor **55-01** near the connection, as shown in the photo.



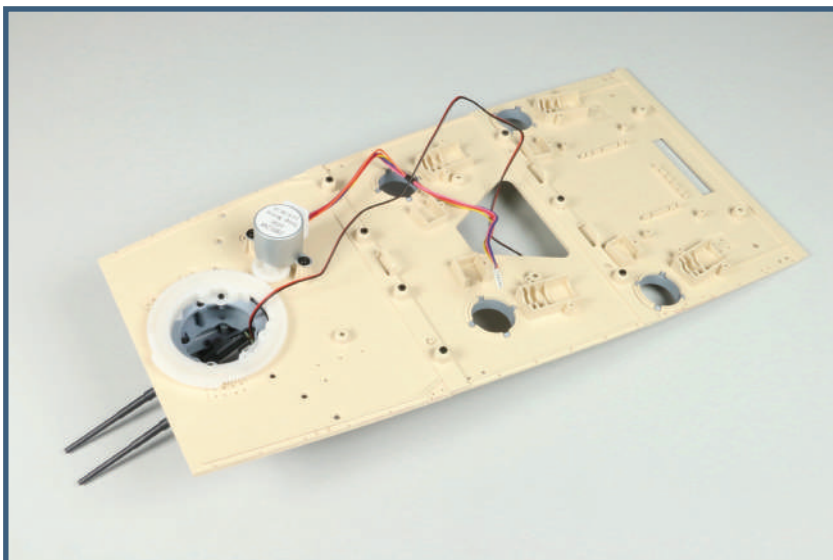
Fit the cog **55-02** on to the shaft of motor **55-01** as shown. This is a push-fit connection.



Take the upper deck structure from stage 53 and carefully place it upside down on your work surface, taking care not to damage the gun turret. Fit the two tabs on the side of the gun turret motor **55-01** on the raised screw sockets on the underside of deck section **19-01** so the holes are aligned.



Check that the cog **55-02** is engaged with cog **53-07** as shown (arrow). Fix the motor in place with two **PWB** screws.

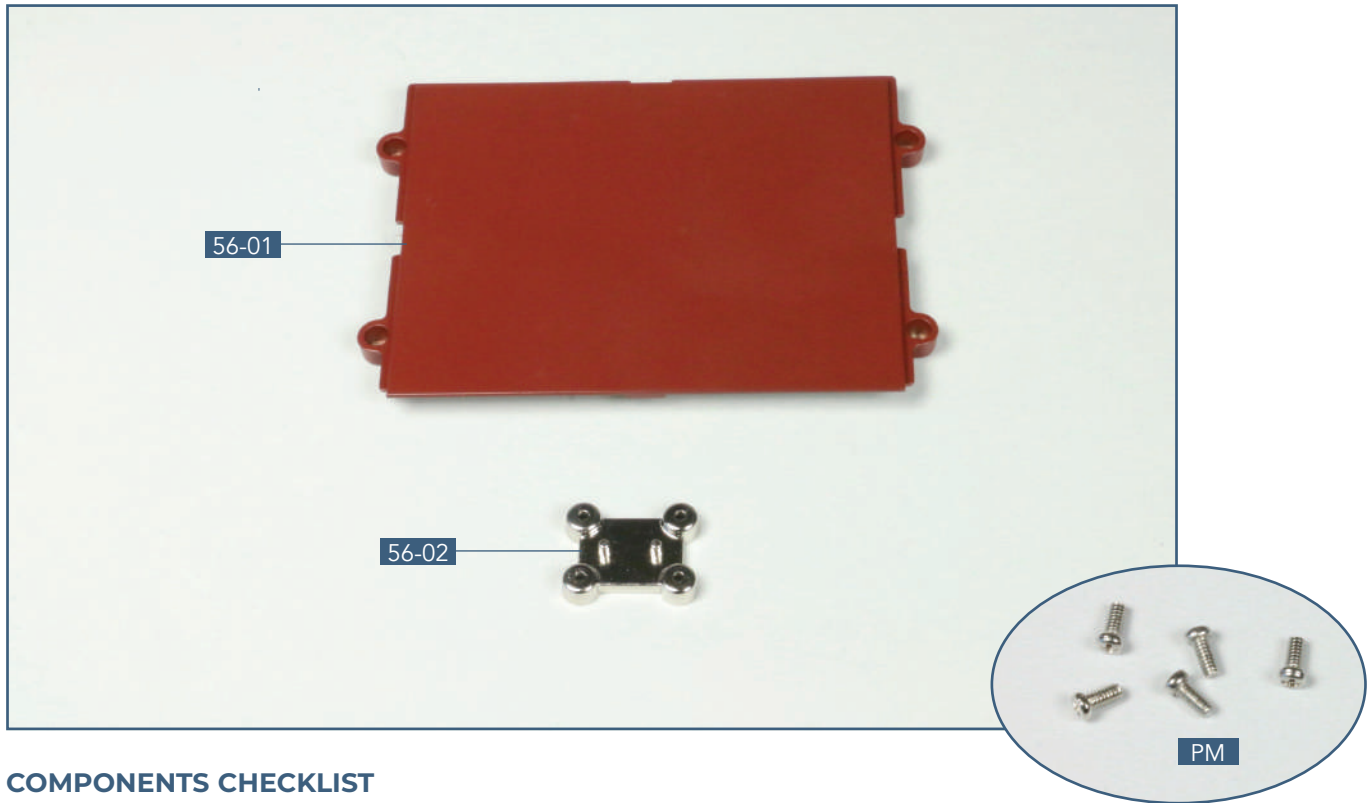


Completed work

The motor that rotates the second 38cm gun turret has been fitted to the underside of the upper deck assembly.

STAGE 56

A KEEL SECTION



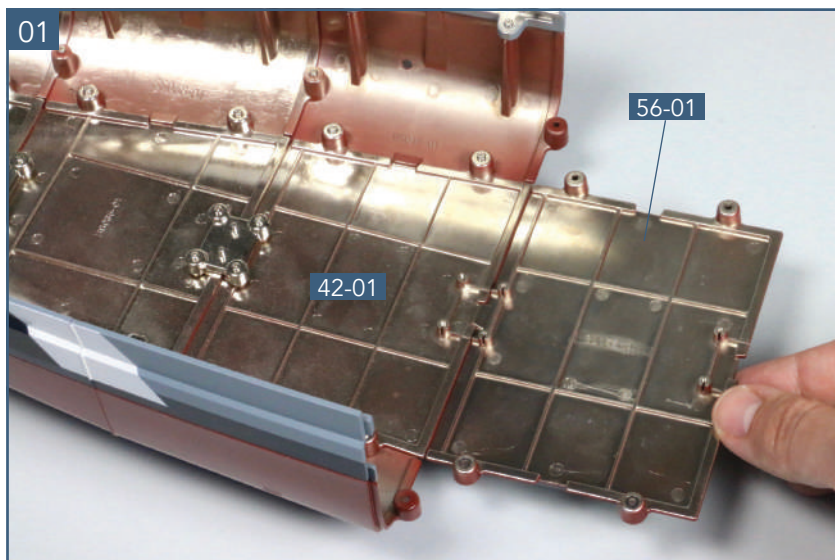
COMPONENTS CHECKLIST

56-01: Seventh keel section

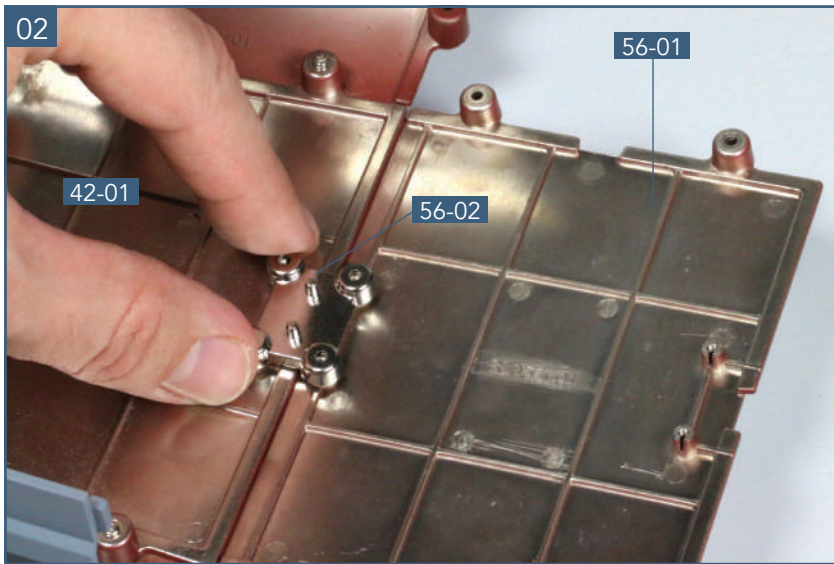
56-02: Connector

PM: Five 2 x 4 mm PM screws

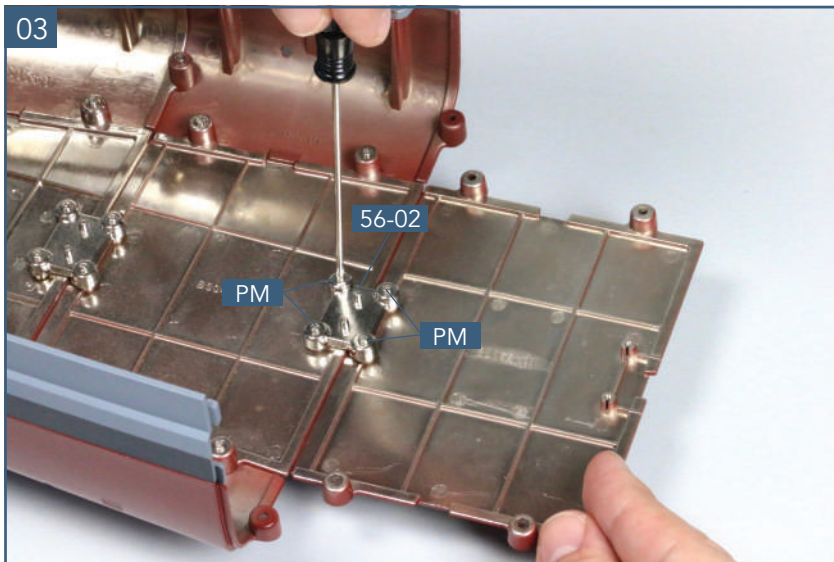
01. FITTING THE KEEL SECTION



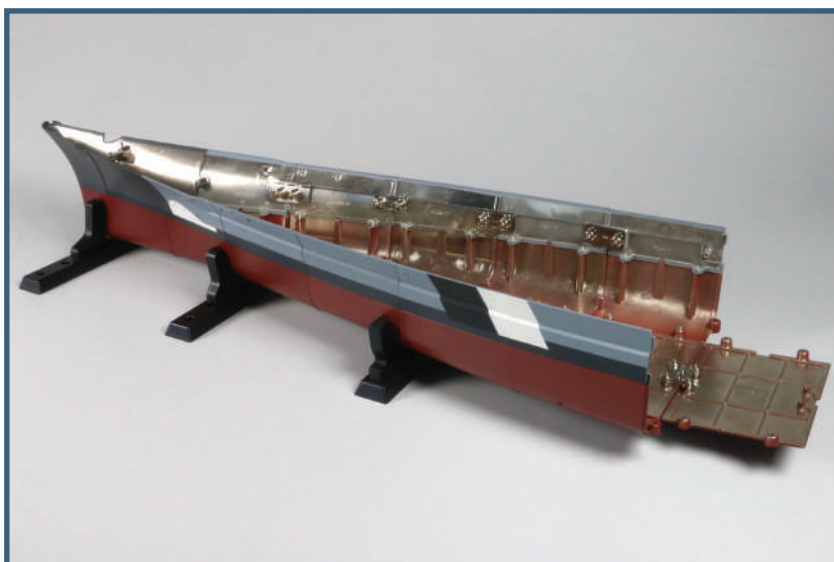
Place the hull assembly on your worktop. Fit the seventh keel section **56-01** against the sixth keel section **42-01**. The two sections should be flush with each other across their width, as shown.



Fit the connector **56-02** over the four raised screw sockets on keel sections **42-01** and **56-01**.



Fix the connector **56-02** in place using four **PM** screws.



Completed work

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