Pack 11 | 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 eleventh model pack, you will assemble:

**STAGE 117:** ROTATION MOTOR FOR THE THIRD 38CM GUN TURRET  
**STAGE 118:** FITTING THE Stern  
**STAGE 119:** THE AFT CIRCUIT BOARD  
**STAGE 120:** THE TWO OUTER PROPELLERS  
**STAGE 121:** THE CENTRAL PROPELLER  
**STAGE 122:** THE GEARBOX FOR THE PROPELLERS  

**STAGE 123:** THE TWIN RUDDERS  
**STAGE 124:** THE AFT ANCHOR AND MOTOR  
**STAGE 125:** MAINMAST AND FOUR AA GUNS  
**STAGE 126:** THE EIGHTH UPPER DECK SECTION  
**STAGE 127:** LAST SECTION OF THE UPPER DECK  
**STAGE 128:** THE FOURTH 38CM GUN TURRET
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.
STAGE 117

ROTATION MOTOR FOR THE THIRD 38CM GUN TURRET

COMPONENTS CHECKLIST

117-01: Motor
117-02: Cog
117-03: Cable label

PWB: Three 2.3 x 5mm PWB screws

01. FITTING THE MOTOR

Place the motor 117-01 on your worktop. Remove the cable label 117-03 from its backing.
Wrap the cable label 117-03 around the end of the cable near the connector, as shown.

Take the cog 117-02 and fit it on to the shaft of the motor 117-01, as indicated.

When the cog 117-02 is fitted onto the shaft of the motor 117-01, push it down as far as possible.
Take the aft superstructure. Carefully turn it on its side and fit it on to a bracket, as described in stage 84; particular care needs to be taken not to damage the protruding gun barrels. Take the motor 117-01 and position it so that the two screw holes are aligned with the raised screw sockets on the underside of deck section 99-01, as indicated. When the motor is correctly positioned, the teeth on cog 117-02 interlock with the teeth of cog 112-09.

Fix the motor 117-01 in place using two PWB screws.

**Completed work**
The motor for rotating the third 38cm gun turret has been fitted to the underside of the deck of the aft superstructure.
STAGE 118
FITTING THE STERN

COMPONENTS CHECKLIST

118-01: Stern
118-02: Port connector (L)

118-03: Starboard connector (R)
PM: Six 2 x 4mm PM screws

01. COMPLETING THE HULL

Place the model on your worktop so that you can access the stern end of the hull. Take the stern 118-01 and fit it against the keel section 115-01: the central screw hole on the edge of the stern fits beneath the screw hole on the keel section, as indicated.
Fix the stern 118-01 to the keel section 115-01 using a PM screw.

Identify the raised screw sockets where the starboard connector 118-03 (labelled R) fits: there is a vertical screw socket on the stern section 118-01 and a horizontal screw socket on the hull section 116-02 (arrows). Fit the connector in place as shown.

Fix the starboard connector 118-03 to the stern 118-01 and the hull section 116-02 using two PM screws.
Moving to the other side of the hull, identify the fixing points for the port connector 118-02 (labelled L). Align the screw holes on the connector with the sockets on the stern 118-01 and the hull section 116-01.

Fix the port connector 118-02 to the stern 118-01 and the hull section 116-01 using two PM screws.

**Completed work**
The final section of the metal hull assembly has been fixed in place at the stern of the model.
STAGE 119
THE AFT CIRCUIT BOARD

COMPONENTS CHECKLIST

119-01: Circuit board

01. TAKE A BREAK!

Completed work
There is no assembly work in this stage. The circuit board 119-01 will be fitted beneath the aft superstructure in the next stage.
STAGE 120
THE TWO OUTER PROPELLERS

COMPONENTS CHECKLIST
120-01: Port propeller with bracket, shaft, support and sleeve
120-02: Starboard propeller with bracket, shaft, support and sleeve
120-03: Two brackets and a shaft grip

PM: Nine 2 x 4mm PM screws
PM: Three 2 x 3mm PM screws
PB: Five 2 x 6mm PB screws

NOTE: In this stage we only use the 2 x 6mm PB screws. The other parts will be fitted in the next stage.

01. ARRANGE AND CONNECT THE CABLES

Carefully place the aft superstructure section (sections 64-01 and 99-01) in support brackets so that you can access the underside of the upper deck. Take care not to damage any of the parts already in place.

Run the cable labelled C-5 from the 38cm turret motor through the bracket in the centre of the upper deck structure, as indicated by the arrow.
Run the cables labelled **C-6, C-7, C-8 and C-9** through the same bracket on the upper deck section **64-01**, in the same direction as **C-5**, as shown.

Press the cables labelled **C-1, C-2 and C-3** into the slots in the rib on the underside of deck section **64-01**, as shown. The slot on the right in this photo remains empty.

Press the cables labelled **C-8, C-9 and C-10** into the three slots in the bar on the other side of the deck, as shown.

Gather together the cables marked **C-5, C-6 and C-7** and run them towards the rear of the deck (to the right in this photo) so that the connectors are clear of where the circuit board **119-01** will be attached (see next two steps).

Take the circuit board **119-01** and position it on the upper deck in the orientation shown. Ports 11 and 12 are on the left in this photo (circled in white).

Fix the circuit board **119-01** in place using four 2 x 6mm **PB** screws.
Fit the connectors on the 10 cables to the corresponding ports on the circuit board:
The cable labelled C-1 goes into port 1 on the circuit board; cable C-2 goes into port 2, and so on. Continue up to the cable labelled C-10, which goes into port 10. The two ports 11 and 12 (circled) remain unused for the time being.

**02. TESTING THE AFT SUPERSTRUCTURE ELECTRONICS**

Take the tester box 18-01 and the battery box 4-07. Check that the switch on the battery box (circled) is off.

Connect the tester cable 18-02 to port 11 (circled) on the circuit board 119-01.
Position the aft superstructures on suitable supports so that the swivel gear can rotate freely. (You can place it on the hull, if preferred.) Turn the switch on the battery box to “On” (circled): the initialization process will start. During initialization, the turret turns fully to port, remains there for a few seconds and then returns to the starting position.

**Note:** you cannot operate all the functions during initialization.

When initialization is complete, press the S1 button on the tester box 18-01 (inset below). This starts the turret test. All three turret functions are carried out simultaneously: rotating (red arrow), elevating (green arrow) and firing (blue arrow). To end the test, press the S1 button again.

To test the two 15cm guns, press button S2 on the tester box 18-01 (inset below). The two turrets swivel. Press the button again to end the test. When fully rotated, the guns may pause for a few seconds before re-starting.

**NOTE:** Choose a suitable elevation for the gun barrels before starting the test (red dotted arrow).
Pressing button S3 on the tester box 18-01 (inset below) turns on the LEDs of the two searchlights on the aft superstructure. End the test by pressing button S3 again.

Button S4 on the tester box 18-01 (inset below) rotates the range finder on the aft control station. End the test by pressing the S4 button again.

Completed work
The aft superstructure electronics have been connected and tested. After completing the tests, turn off the battery box and carefully remove the tester cable from port 11 of the aft circuit board.
STAGE 121
THE CENTRAL PROPELLER

COMPONENTS CHECKLIST

121-01: Motor for the propellers
121-02: Central propeller with shaft, support and sleeve
121-03: Cable label (D-2)

PM: Four 2 x 4mm PM screws
PM: Two 2 x 3mm PM screws

NOTE: You will also need all the parts supplied with stage 120. The 2 x 3mm PM screws are not used in this stage, so store them safely for later.

01. FITTING THE TWO OUTER PROPELLERS

Place your model on your work surface so that you can access the stern of the hull. Take the brackets A and B (marked L and R) from the frame 120-03. You will also need four 2 x 4mm PM screws.

Fit the bracket marked L on the two pegs located on the port side of the keel section 115-01. Fix in place with two 2 x 4mm PM screws, as shown.
Similarly, fit the bracket marked R on the pegs on the starboard side of the keel section 115-01. Fix in place with two 2 x 4mm PM screws.

Take the starboard propeller 120-02 and check how it fits on the starboard side of the hull (see also next step). Apply a little superglue on the flat ends of the brackets (arrows).

Thread the end of the shaft of the propeller through the opening in keel section 111-01, as shown.

Position the propeller 120-02 so that the two ends of the shaft bracket can be glued into the holes in keel section 115-01.

Turn the support on the propeller 120-02 (arrow) so that the flat side is against the hull and slide it forwards, against the opening in keel section 111-01.

Working from inside the hull, fix the support for the propeller 120-02 in place with two 2 x 4mm PM screws.
Turning to the port side of the hull, insert the shaft of propeller 120-01 into the opening on the port side of keel section 111-01. Apply some glue to the two ends of the shaft bracket (arrows).

Push the propeller assembly 120-01 in place so that the two ends of the shaft bracket can be glued into the holes in keel section 115-01.

Turn the support on the propeller 120-01 so that the flat side is against the hull and slide it forwards, against the opening in keel section 111-01.

Working from inside the hull, fix the support of the propeller 120-01 in place with two 2 x 4mm PM screws, as shown.

02. Fixing the ends of the shafts in place

Pull the ends of the propeller shafts 120-01 and 120-02 forwards as far as possible along the channels in the keel section (arrows).

At the same time, the fine metal sleeves on the shafts (indicated by the arrows) should be pushed aft as far as possible.
03. FITTING THE CENTRAL PROPELLER

01. Take the central propeller 121-02 and identify the hole at the aft of the hull where it fits (arrow).

02. Insert the end of the propeller shaft 121-02 into the opening in the propeller housing 115-04, as shown.

03. Fit the support for the propeller 121-02 (indicated by the arrow) against the opening in part 115-04.

04. From inside the hull, fix the support for the propeller 121-02 to the keel section 115-01 using a 2 x 4mm PM screw, as shown.

Fix the fine metal sleeve on the port propeller 120-01 in position by screwing a 2 x 3mm PM screw into the hole in the shaft sleeve, as shown.

Similarly fit the metal sleeve on the starboard propeller 120-02 in position with a 2 x 3mm PM screw.
Completed work

The three propellers have been fitted to the hull. The propeller motor will be fitted in the next stage.
STAGE 122
THE GEARBOX FOR THE PROPELLERS

COMPONENTS CHECKLIST
122-01: Port gearbox support
122-02: Starboard gearbox support
122-03: Upper part of the gearbox
122-04: Lower part of the gearbox
122-05: Three cogs
122-06: Cog
122-07: Cog
122-08: Cog
122-09: Three small cogs
122-10: Port cog and pin housing
122-11: Starboard cog and pin housing
122-12: Three pivot pins
122-13: Three grips and a bracket
122-14: Two cog shafts
122-15: Cog shaft
122-16: Two cog shafts
122-17: Cog shaft

Thirteen 2 x 4mm PM screws
Four 2 x 3mm PM screws
Nine 2 x 4mm PB screws
Seven 2 x 6mm PB screws

01. PREPARATORY WORK

Place the port cog housing 122-10 (labelled L) in front of the port propeller shaft 120-01, fitting it onto the two raised screw sockets on the keel 111-01, as shown.

Fix the port cog housing 122-10 to the keel section 111-01 using two 2 x 4mm PM screws.
Position the starboard cog housing 122-11 in front of the starboard shaft 120-02 and fix it to the keel section 111-01 with two 2 x 4mm PM screws.

Remove the bracket C from the frame 122-13 and fit it onto the two raised screw sockets of connector 111-02.

Fit the three cogs 122-09 into the circular recesses in the two cog housings 122-10 and 122-11, and into the recess in the connector 111-02, as shown.

Take the port gearbox support 122-01 (labelled L) and position it in the hull on the port side: three screw holes in the lower tabs align with raised screw sockets in the hull.

Fix the port gearbox support 122-01 in place in the hull using three 2 x 4mm PM screws.

Similarly, fix the starboard gearbox support 122-02 in place in the starboard side of the hull using three 2 x 4mm PM screws. (In this photograph, the hull is viewed from the other side.)
Take the lower part of the gearbox 122-04 and two 2 x 6mm PB screws. Fit the motor 121-01 in the recess of the lower part of the gearbox as shown.

Fix the motor 121-01 in place in the lower part of the gearbox 122-04 using the two 2 x 6mm PB screws, as shown.

**02. FITTING THE COG SHAFTS**

Fit the first pivot pin 122-12 into the port cog housing 122-10. Make sure that the hole in the pin faces upwards (arrow).

Grip the end of shaft 120-01 with the flattened side of the end facing upwards (red arrow). Fit it into the open end of the pivot pin 122-12 (yellow arrow).

When the end of the shaft 120-01 is fitted into part 122-12, fix it in place with a 2 x 3mm PM screw.

Take one of the grips, A, from frame 122-13 and position it on the cog housing, over the pivot pin 122-12. Fix in place with two 2 x 4mm PB screws.
Similarly on the starboard side, fit the pivot pin 122-12 into the cog housing 122-11. Make sure that the hole in part 122-12 faces upwards (arrow). (The hull is viewed from the other side to the previous step.)

Fit the end of the propeller shaft 120-02 into part 122-12, with the flat side facing upwards. Fix in place with a 2 x 3mm PM screw.

Take the shaft grip B from frame 122-13 and fit it onto cog housing 122-11. Fix it in place with two 2 x 4mm PB screws. The cog 122-09 and the cog from 122-12 mesh with each other (arrow).

Fit the third pivot pin 122-12 on the third cog housing, again with the hole facing upwards. Grip the end of the central shaft 121-02 so that the flat side faces upwards (arrow).

Fit the end of the propeller shaft 121-02 into the opening in part 122-12. Fix in place with a 2 x 3mm PM screw.

Fit the grip D from frame 122-13 over the pivot pin. Fix it to the connector 111-02 with two 2 x 4mm PM screws. After fitting, check that the propellers can rotate freely.
03. ASSEMBLING THE GEARBOX

01. Fit the lower part of the gearbox 122-04 on the two supports 122-01 and 122-02, as shown.

02. Fix the lower part of the gearbox 122-04 to the two supports using four 2 x 4mm PB screws, as shown.

03. Take one of the cog shafts 122-14 and fit it into the aft starboard hole in the lower part of the gearbox 122-04.

04. Press the shaft 122-14 through so that the lower end fits into the central hole on cog 122-09 (arrow).

05. Similarly, fit the second cog shaft 122-14 into the hole furthest to the port in the lower part of the gearbox 122-04. Push it down so the end fits into the hole in cog 122-09.

06. Fit the cog shaft 122-15 into the hole at the centre of the lower part of the gear box 122-04 and into the hole in cog 122-09.
Fit the two cog shafts 122-16 into the remaining two holes in the lower gearbox unit 122-04, as shown.

Take the cog 122-07 and fit the cross at the centre on to the shaft of the motor 121-01, which is attached to the lower part of the gearbox.

Fit the cog 122-06 (round centre) on cog shaft 122-16 on the starboard side so that its teeth interconnect with the teeth of cog 122-07, as shown.

Fit one of the cogs 122-05 on the right-hand cog shaft 122-14 and one on the central cog shaft 122-15, as shown.

Fit cog 122-08 on the left-hand cog shaft 122-16. Finally, the third cog 122-05 is fitted on the left-hand cog shaft 122-14.

Fit the short cog shaft 122-17 into the central hole of cog 122-07 (fitted on the motor).
Fit the upper part of the gearbox **122-03** on top of the lower part of the gearbox **122-04** so that the recesses inside **122-03** fit on to the ends of the six cog shafts, as shown.

Fasten the upper part of the gearbox **122-03** to the lower part of the gearbox **122-04** with four 2 x 6mm PB screws, as shown.

**Completed work**
The three propeller shafts have been fitted to pivot pins and connected to the gearbox. Cogs and shafts connect the propeller motor to the propeller shafts.
STAGE 123
THE TWIN RUDDERS

COMPONENTS CHECKLIST
123-01: Motor for the rudders
123-02: Large cog
123-03: Port cog (L)
123-04: Starboard cog (R)
123-05: Cog support
123-06: Two rudders
123-07: Cable label (D1)

01. ASSEMBLING THE RUDDERS AND COGS

Position the cog support 123-05 on the hull assembly so that it sits on the raised screw sockets in the stern section 118-01.

Fit the port cog 123-03 (marked L) on the raised socket on the port side of the stern 118-01, as indicated. Note the position of the three ribs: rib 1 (on the inside of the hull) sits between the ribs 2 and 3 on the cog.
This shows cog 123-03 correctly positioned in the port side of the stern 118-01: note that the teeth point towards the centre of the hull, as indicated.

Insert the shaft of the first rudder 123-06 up into the hole on the port side of stern section 118-01, as shown.

Fit the starboard cog 123-04 (marked R) on the raised socket on the starboard side of the stern section 118-01. Make sure the ribs are aligned correctly, so that the rib on the inside of the hull is between the ribs on the cog.

This detail shows the port cog 123-03 viewed from the port side. Turn the cog so that the ribs on the cog (red arrows) are positioned as shown, with one against the rib on the inside of the hull (yellow arrow).

This shows cog 123-03 correctly positioned in the port side of the stern 118-01: note that the teeth point towards the centre of the hull, as indicated.

The shaped end of the shaft of the rudder fits into a corresponding recess in the cog. Fix the rudder 123-06 in place using a PWM screw, inserted through the cog and the raised socket and into the rudder shaft.

Ensure that the ribs of cog 123-04 are in the correct position and the teeth are facing towards the centre of the hull. Note that with the cogs 123-04 and 123-03 in the correct positions, the rudders are parallel.
Completed work
The two rudders and the motor have been fitted to the stern of the model.
You may find that the fit of the motor is a bit wobbly.
This will be fixed in a later stage.
STAGE 124
THE AFT ANCHOR AND MOTOR

COMPONENTS CHECKLIST
124-01: Anchor motor
124-02: Gear housing (left side)
124-03: Gear housing (right side)
124-04: Cog with brake tab
124-05: Cog with cable reel
124-06: Cable reel
124-07: Cog on shaft
124-08: Worm gear on shaft
124-09: Anchor chain
124-10: Anchor shank
124-11: Anchor head
124-12: Anchor ring
124-13: Shaft (shorter)
124-14: Shaft (longer)
124-15: Switch and cable
124-16: Cable label (D-7)
124-17: Cable label (D-8)
PM: Three 2 x 4mm PM screws
PB: Four 1.7 x 6mm PB screws

01. ASSEMBLING THE GEARBOX FOR THE AFT ANCHOR

Place the right-hand side of the gear housing 124-03 on your worktop. Insert the shorter shaft 124-13 into the socket in the housing, as shown.
Take the cog with the brake tab 124-04 and fit it on the shaft 124-13. Ensure that the tab is aligned with the shaft as shown (arrow).

Fit the shaft of the cog 124-07 in the next socket in the gear housing 124-03. The inner row of teeth on the underside of cog 124-07 mesh with the teeth of cog 124-04.

Take the switch 124-15 and attach the cable label 124-17 (D-8) to the cable, near the connector, as shown.

Fit the switch 124-15 into the gear housing 124-03. Note the alignment of the switch: the tab reaches towards the middle of the first cog.

Turn the shaft 124-07 until the tab on cog 124-04 comes up against the tab of the switch 124-15, indicated by the straight arrow.

Put the cable reel 124-06 on your worktop and check how the ring on the end of the anchor chain 124-09 fits over the hub. Apply a little glue to the hub to hold the ring in place.
This shows the ring of the anchor chain 124-09 in place on the hub of the cable reel 124-06.

**NOTE:** Check the assembly of the next four steps before applying any glue to the shaft (step 9).

Place the cog with the cable reel 124-05 on the shaft 124-14 so that the anchor chain 124-09 goes through the notch (arrow). The flat side of part 124-05 butts up against the hub of part 124-06. The anchor chain can then wind around the hub.

Take the longer shaft 124-14 and fit it into the hub of the cable reel 124-06. When you have checked the fit (see steps 10, 11 and 12) apply a little glue to the middle of the shaft to hold the cable reel hub in place.

Wind the anchor chain 124-09 clockwise half a turn around the cable reel 124-05/124-06, as shown. Note the orientation of the reel as you wind it.

Fit the shaft 124-14 into the socket in the gear housing 124-03. The cog of the reel 124-05 engages with the large cog 124-07.

Take the anchor motor 124-01 and attach the cable label 124-16 (D-7) to the cable near the connector, as shown.
Take the worm gear 124-08 and fit the open end on to the shaft of the anchor motor 124-01, as shown.

Fit the motor and lengthways cog assembly 124-01/124-08 into the gear housing 124-03. The thread of the lengthways shaft (arrow) must engage with the large cog 124-07.

Take the left side of the gear housing 124-02 and fit it against the right side 124-03. The free ends of the shafts fit into the sockets in part 124-02. See the next step for the correct orientation of the motor 124-01.

Fix the two halves of the gear housing together using three PB screws: they fit into screw holes in part 124-02 and screw into sockets in part 124-03.

**02. INSTALLING THE GEARBOX AND FITTING THE ANCHOR**

Fit the anchor shank 124-10 into the hole in the anchor head 124-11. The shank is inserted from below, pushing the eyelet on the end of the shank through the hole first.

Attach the anchor ring 124-12 to the eyelet located at the top of the anchor shaft 124-10, as shown.
Completed work
The motor and gears for the aft anchor have been assembled and fitted inside the hull.

Place the hull assembly on your worktop, so that you can access the stern end. The gearbox 124-02/124-03 fits near the aft of the hull.

Before positioning the gearbox, run the anchor chain 124-09 through the hole in part 118-01, on the port side at the stern, as shown.

Position the gearbox housing 124-02/124-03 so that tabs with screw holes fit onto raised screw sockets in the hull section 118-01 (arrows).

Use two PM screws to fix the gearbox housing in place on part 118-01, as shown.

Take the anchor assembly 124-10/124-11 and fit the ring 124-12 into the last link of the anchor cable 124-09, as shown.

Completed work
The motor and gears for the aft anchor have been assembled and fitted inside the hull.
STAGE 125
MAINMAST AND FOUR AA GUNS

COMPONENTS CHECKLIST

125-01: Mainmast (lower section)
125-02: Middle section of the mainmast (E to I)
125-03: Upper section of the mainmast (A to D)
125-04: Two vents and an antenna (J to L)
125-05: Four heavy AA gun mounts
125-06: Four twin barrels of the AA guns
125-07: Four bases for the AA guns
125-08: Metal parts (1 to 6)
125-09: Four ladders (7 to 10)
125-10: Railing
125-11: Spar support
125-12: Antenna

01. THE UPPER SECTION OF THE MAINMAST

The frame 125-03 in close-up shows three spars, A, C and D and the upper mast section B. Carefully remove all four parts from the frame.

Remove the four ladders 7 – 10 from the frame 125-09. Bend the tabs up at right angles. The lower tab on part 8 is bent twice at right angles (forwards and upwards) to form a U shape (arrow).
Place the upper mast section B on your worktop. Check how the tabs on ladder 7 fit into the recesses in part B (arrows). Apply a little superglue to fix in place.

The short spar C fits across the mast: check the fit, then apply a little superglue to fix the spar in place.

Turn the mainmast section B over and check the fit of spar D. A peg on the mast fits into the socket in the spar.

When you are happy with the fit apply a little superglue to the peg and fix in place, ensuring that both spars are parallel.

Take the tip of the mast, part 3 from the metal frame 125-08. Very carefully, bend the central prong upwards, at right angles to the two arms. Check the fit on the upper end of mainmast section B.

When you are happy with the fit, glue the mast tip 3 in place, as shown.
In close-up, frame 125-02 includes the middle mast section E, a platform F, a rail G, the signal lamp support H and the signal lamp I.

Platform F fits on the lower end of the mast section E. Make sure you fit the platform the right way round – the sides have holes close to the edges (arrows). The wider side of the platform (on the left in this photo) is beneath the spar support 125-11. Glue the platform in place.

The spar support 125-11 slopes upwards at an angle to the mast. The spar A from frame 125-03 is fitted to the brackets on the front of part 125-11. Glue the spar in place, as shown.

The peg on the lower end of mast section E, which pokes through the hole in the platform F, fits into the top of the mainmast section 125-01. Check that they are correctly orientated, noting the position of the holes (arrows). Glue the parts together, as shown.

Take the mast section E from frame 125-02. Fit mast sections B and E together with the spar support 125-11 between them. Holes in parts B and E are facing downwards. Glue part E in place on part B.

Glue the rail G from frame 125-02 to the central strut of part 125-11, on the upper side, as shown. The antenna 125-12 is glued in place on the leading edge of the spar A, as shown.

**02. THE LOWER SECTION OF THE MAINMAST**

The lower section of the mainmast
Take the ladder 10 and check how it fits on the front of mast section E. Apply a little superglue to the tabs on the ladder to fix it in place.

Take part 6 from frame 125-08. This is a safety barrier for the rudder indicator. Bend the barrier twice at right angles, as shown (photographed upside down).

The tabs on the lower edge of part 6 fit into the holes in the platform F. Check the fit, with the open side of the barrier facing away from the ladder. Glue in place.

On the open side of the barrier, two tabs in part 6 fit into holes in part 1 from frame 125-08 (the barrier and speed indicator). Glue part 1 in place, as shown.

The ladder 9 from frame 125-09 fits on the lower section of the mainmast 125-01. Glue the two tabs to the mast.

Take the signal lamp support H and the signal lamp I from the frame 125-02. Check how the parts fit together, as shown, and glue the signal lamp in place.
09

The end of signal lamp support H fits into a recess behind the ladder 9 on the lower mainmast 125-01, as shown. Glue in place.

10

The platform 2 from frame 125-08 fits in the slot in the mast 125-01 below the ladder 9. Glue in place, as shown.

11

The ladder 8 fits below the platform 2. The tab with two right-angled bends fits into a slot in the platform (circled). Glue in place.

12

Hold the lower mast 125-01 upright on your worktop. Take the railing 125-10 and glue it in place around the edge of platform 2.

03. FITTING THE MAINMAST

01

Place the aft superstructure on your worktop. Identify the hole on the central hangar 94-01 where the mainmast 125-01 fits.

02

Check the fit and then glue the mainmast 125-01 to the central hangar 94-01, as shown. Note the position of the ladders.
The free tab near the base of ladder 8 is glued into the hole in the railing on the front of the aft signal stand 107-03 (see arrow).

Remove the antenna shaft L from the frame 125-04 and glue it in place against the mast on the central hanger 94-01, as shown.

Take the vent pipe J from the frame 125-04: two pegs on part J fit into holes in the central hangar 94-01 and the antenna shaft L. Glue in place.

The vent pipe K from frame 125-04 is glued to the other side of the main mast in the holes on the central hanger 94-01 and on the antenna shaft L.

Take strut 4 and a strut 5 from frame 125-08: they fit on the boat supports on the starboard side of the central hangar. Make sure you have them in the correct position, then glue in place.

The other two struts 4 and 5 from frame 125-08 fit on the boat supports on the port side of the central hangar. When they are correctly aligned, glue them in place.
04. THE FOUR TWIN AA GUNS

Take a double barrel 125-06 and fit it into one of the mounts 125-05 from below. The side pins on the barrels fit in the semicircular recesses on the mount (arrows).

Separate a base plate 125-07 from one of the two frames. Apply a little superglue to the recess around the lower edge of the gun mount 125-05 and fix the base to the mount, as shown.

Repeat steps one and two with the three other parts 125-05, 125-06 and 125-07 to make a total of four identical anti-aircraft guns, as shown.

Two of the four anti-aircraft gun mounts 125-05 fit on the port side of the aft superstructure. Pegs on the underside of the base plates fit into holes in the superstructure deck. Press them in place but do not use any glue.

The other two anti-aircraft guns 125-05 fit on the starboard side of the aft superstructure. Do not use any glue – the guns need to rotate.

Completed work
The mainmast and four heavy anti-aircraft guns have been fitted to the aft superstructure.
STAGE 126
THE EIGHTH UPPER DECK SECTION

COMPONENTS CHECKLIST
126-01: Eighth upper deck section
126-03: Skylights and two loading practice machines
126-04: Eleven smoke generation containers and ten depth charges
126-05: Two railings
126-06: Two railings
126-07: Railing (port)
126-08: Railing (starboard)

01. DETAILS FOR THE UPPER DECK

Take the skylight D from frame 126-03 and check how it fits in the slight recess in the upper deck section 126-01. Glue in place.

The skylight E from frame 126-03 fits in the adjacent recess of the upper deck section 126-01. Glue in place, as shown.
Take the three identical skylights B from frame 126-03 and check how they fit at the front end of the upper deck section 126-01. Use a little superglue to fix them in place.

**NOTE:** The AA gun, circled in red, will be supplied with a later stage.

Two skylights A from frame 126-03 are positioned on the upper deck section 126-01, close to the skylights B. Glue in place, as shown.

The two loading practice machines C and F from frame 126-03 are glued in place in the last two recesses near the front edge of the upper deck section 126-01, as shown.
Take four depth charges H from frame 126-04 and glue them in place with the pegs fitting into the holes next to skylight E on deck section 126-01.

Separate all eleven smoke containers G from frame 126-04 and glue them in place next to skylights D and E on upper deck section 126-01, as shown.

The remaining six depth charges H from frame 126-04 are glued to the port side of the aft superstructure on upper deck section 99-01, as shown.
03. FITTING THE SIX RAILINGS

Bend each of the two railings 126-05 along the fold line, in opposite directions. In order to judge the exact angle of the bend, see steps 02 and 05. This creates railings X and Y.

Railing Y is glued to deck covering 102-01 on the port side of the aft superstructure, as shown. **NOTE:** In this photo, there is an AA gun fitted on the upper deck of the superstructure (arrow). This gun will be supplied and fitted in pack 12.

Take one of the two semicircular railings 126-06: this forms a continuation to railing Y. The two pegs on the lower edge of the railing are glued into holes in the aft superstructure deck 102-02.

The railing 126-07 forms a continuation to railing 126-06: pegs on the lower edge are glued into holes in the deck covering 102-01 and the superstructure deck 102-02, as shown.
Move to the starboard side of the aft superstructure. Glue the railing X in place on the deck covering 102-01, as shown in the photo.

**NOTE:** The AA gun fitted on the upper deck of the superstructure will be fitted in pack 12.

Railings 126-06 and 126-07 continue the line of railing X. Glue them in place in the holes in the deck covering 102-01 and the superstructure deck 102-02.

**Completed work**

Various details have been fitted to the upper deck section. Railings have been fitted around the superstructure.
STAGE 127
LAST SECTION OF THE UPPER DECK

COMPONENTS CHECKLIST

127-01: Aft upper deck section
127-02: Details for the aft deck (A to D)
127-03: Skylights
127-04: Anchor chain opening, chain holder and depth charges (E to H)
127-05: Two electric capstans (I to L)
127-06: Two depth charge racks (M, N)
127-07: Two platforms with railing (O, P)
127-08: Four ladders (Q to S)
PB: Five 2.3 x 4mm PB screws

01. DETAILS FOR THE TWO AFT UPPER DECK SECTIONS

Place the eighth upper deck section 126-01 on your worktop. Separate one of the skylights A from the frame 127-02 and glue it in place between the two larger skylights fitted in the previous stage.

Take two more skylights A from frame 127-02 and glue them in place at the forward end of the upper deck section 126-01, as shown.
Continuing with the eighth upper deck section 126-01, glue eight small skylights from frame 127-03 in place near the rear edge of the deck section, as shown.

Glue the two larger parts C and D from frame 127-02 into recesses on the upper deck section 127-01, next to the parts fitted in step 4.

Take the aft upper deck section 127-01, supplied with this stage. Glue the last skylight A and skylight B from frame 127-02 in place in recesses, as shown.

Glue the six remaining skylights from frame 127-03 in place on the aft upper deck section 127-01, as shown.

Take the anchor chain opening F from frame 127-04 and glue it in place at the aft end of upper deck section 127-01. Glue the anchor chain holder E in line with it and the handwheel G on top of part E, as shown.

Take the two parts M and N from the frame 127-06 and bend them along the three fold lines to make two depth charge racks. They are mirror images of each other, as shown above.
Glue the two depth charge racks M and N in place on the upper deck section 127-01, as shown.

Glue the depth charges H from frame 127-04 inside each of the depth charge racks.

02. ASSEMBLING THE AFT CAPSTANS

The parts from frame 127-05, are used to make two capstans. Take a base plate I and glue two rope drums K in the recesses on either side of the central socket.

The pin on the underside of capstan head L passes through the lower part J and is glued into the corresponding hole in the centre of the base plate I.

Build a second, identical, capstan using a base plate I, two rope drums K, and two parts of the capstan head J and L, as shown.

Glue the two electric capstans made with parts from frame 127-05 in place at the forward edge of the aft upper deck section 127-01, as shown.
03. ASSEMBLING THE AFT DECK SECTIONS

Carefully turn the upper deck sections, 126-01 and 127-01, upside down, taking care not to dislodge any details. Align the screw holes, as indicated.

Use four PB screws to fix the two deck sections together, as shown.

04. PLATFORMS AND LADDER FOR THE AFT SUPERSTRUCTURE

Take the two platforms with railings from the frame 127-07. Bend the parts to create two walkways that are mirror images of each other (O and P).

Check the fit of walkway O on the starboard side of the aft superstructure. Tabs on the side of the platform fit into holes in the vents on the gun turret (circled), and a peg on the bottom of the railing fits into a hole in deck covering 102-01. Glue in place.

The second walkway, P, is glued to the two vents and the deck covering 102-01 on the other side of the gun turret, in a similar way.

Take the ladders Q and R from frame 127-08. Bend the handrails upwards and twist the steps to create two ladders that are mirror images of each other, as shown.
Remove the two identical ladders S from frame 127-08. Bend the handrails and steps to create two ladders, as shown.

Ladder R fits in the same place on the starboard side of the aft superstructure, running from the upper deck 99-01 to the decking of the superstructure deck 102-01. Glue in place.

The first ladder S fits on the starboard side of the aft superstructure, running from the upper deck 99-01 to the decking of the superstructure deck 102-01. Glue in place.

The second ladder S fits in the same place on the port side of the aft superstructure. Glue in place, as shown.

Completed work
Details have been added to the two aft deck sections, and they have been fixed together. Four ladders have been fitted to the aft superstructure.
STAGE 128
THE FOURTH 38CM GUN TURRET

COMPONENTS CHECKLIST

128-01: Motor
128-02: Barbette
128-03: Gun turret housing
128-04: Base of the turret
128-05: Connector for barrels
128-06: Tension spring
128-07: Motor mounting (upper part)
128-08: Two periscopes
128-09: Twin barrel cradle with base plate
128-10: Clutch shaft
128-11: Motor mounting (lower part)
128-12: Left side rangefinder arm hood
128-13: Right side rangefinder arm hood
128-14: Ring
128-15: Two gun barrels
128-16: Two ladders
128-17: Two washers
128-18: Cable label
PB Eleven 2 x 6 mm PB screws

01. DETAILS FOR THE GUN TURRET

Place the gun turret housing 128-03 on your worktop. Remove the two periscopes 128-08 from the frame and check the fit in the two holes on either side of the turret housing. Have some superglue ready.

When you have checked the fit of the periscopes in the holes on the sides of the gun turret housing, apply a little superglue to the periscopes and fix in place.
Take the two ladders 128-16 and check how they fit on each side of the gun housing 128-03. Glue in place, as shown.

Glue the right rangefinder hood 128-13 and the left rangefinder hood 128-12 to the raised projections behind the two ladders.

**02. ASSEMBLING THE GUN BARRELS AND MOTOR**

Place the connector 128-05 and the two gun barrels 128-15 on your worktop. Apply a little superglue to the end of one of the barrels and fix it in place in the connector, as indicated.

Glue the second gun barrel 128-15 in place in the other socket on the connector 128-05.

Fit the ring 128-14 against the back of the connector 128-05, so that the shaped edges match. Have the clutch shaft 128-10 ready.

Insert the end of the clutch shaft 128-10 into the ring 128-14 and push it through so that the wide end of part 128-10 is flush with the edge of the ring 128-14.
Fit the tension spring **128-06** on to the clutch shaft **128-10**. Turn the assembly over and fit the gun barrels into the cradle **128-09** in the direction indicated. The clutch shaft **128-10** fits into the central hole in the cradle. Push the barrel connector backwards and forwards a few times to ensure that it moves freely.

Place the upper part of the motor mounting **128-07** on the base plate of the barrel cradle **128-09**, as shown. You will need two **PB** screws.

Turn the assembly over and fix the upper part of the motor mounting **128-07** to the base plate **128-09** using the two **PB** screws.

Take the motor **128-01** and the cable label **128-18**. Remove the label from its backing and wrap it around the end of the cable, as shown.

Fit the motor **128-01** into the motor mounting **128-07**. Make sure that the cables on the circuit board of the motor **128-01** are in the direction shown (arrow).

Fit the lower part of the motor mounting **128-11** on the upper part **128-07**. Fix the parts together using two **PB** screws.
03. FITTING THE GUN BARRELS INTO THE TURRET HOUSING

Place the turret housing 128-03 upside down on your worktop. Fit the two gun barrels 128-15 through the holes in the front of the housing, as shown.

Fit the base of the turret 128-04 on the underside of the gun housing 128-03, with the wire running through the base 128-04. You will need six PB screws.

Pegs on the sides of the cradle fit into raised brackets inside the gun housing (arrows) to hold the assembly in the correct position.

Fix the base 128-04 in place on the underside of the gun housing 128-03 using six PB screws, as shown.

04. FITTING THE BARBETTE

Take the aft upper deck section 126-01/127-01 and fit the small tabs on the barbette 128-02 into the recesses around the opening on the upper deck.

This shows the barbette 128-02 positioned on the upper deck section 126-01.

NOTE: The two AA guns shown in steps 1 and 2 will be fitted in a future stage.
TWO WASHERS FOR THE RUDDER MOTOR

Remove the two **PM** screws holding the motor **123-01** in place at the rear of the hull assembly. The arrow indicates where the second screw has been removed.

Fit a washer **128-17** on top of each of the raised screw holes where the motor was fitted.

Fit the motor **123-01** back in place so that the two side tabs rest on washers **128-17**, as shown. Ensure the rudders are in the correct position as shown in stage 123.

Fix the motor **123-01** back in place using the two **PM** screws.

**Completed work**
The fourth 38cm gun turret has been assembled, with the barbette fitted into the upper deck. Two washers have been inserted to give the rudder motor a better fit.