U 96 U-BOAT

Pack 21
Assembly
Instructions

Kit 81: A fourth magnet

Kit 82: Electric motor room bulkhead

Kit 83: Electric motor room deckhead

Kit 84: Main rudder motor



In this kit, the NCO accommodation compartment is added to the main assembly. Cabling is bundled together, a port (L) hull section is attached, and a fourth magnet with mounting plate and connectors is added to stabilise the structure.



Parts reference list		
Part no.	Name	
81-1	Connector	
81-2	Connector	
81-3	Mounting plate	
81-4	Cable guide	
81-5	Crossbeam	
81-6	Connector	
81-7	Connector	
81-8	Connector	
81-9	Magnet	

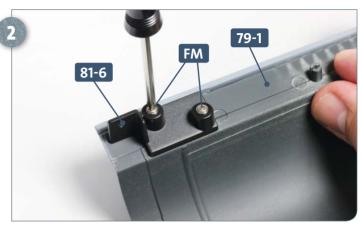


Screws				
Ref	No.	Dimensions		
FM	10 + 1	2 x 4 mm (PWD)		
СР	14 + 1	2 x 4 mm (PWB)		

STAGE 1 → The hull and installation of the NCO quarters



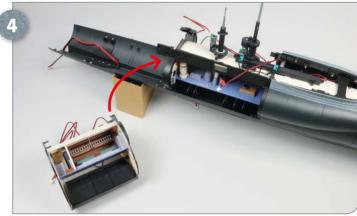
Take the port (L) hull section **79-1**, which was supplied with kit 79, the three connectors **81-6**, **81-7** and **81-8** and six **FM** screws. Arrange the parts as shown in the photograph above.



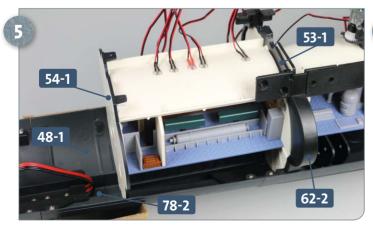
Attach the connector **81-6** to the aft end of the hull section **79-1** using two **FM** screws.



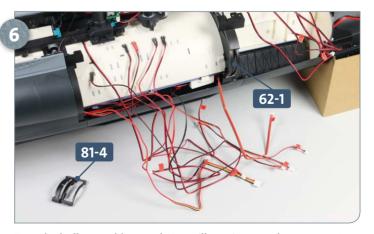
Next, attach connectors **81-7** and **81-8** to the hull section **79-1** using two FM screws for each.



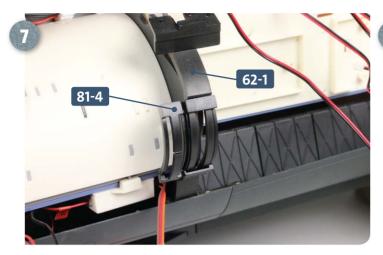
Place the hull assembly on your worktop. Now take the fourth compartment and insert it into the hull structure behind the third compartment, as indicated by the arrow.



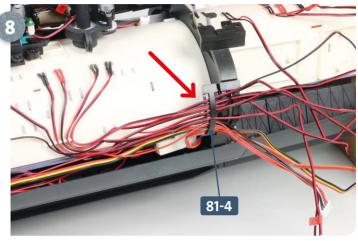
Place the fourth compartment inside the hull so that the forward bulkhead 53-1 sits in connector 62-2, and the aft bulkhead 54-1 rests on the lower hull section 48-1. Make sure that the connector wire 78-2 is tucked out of the way.



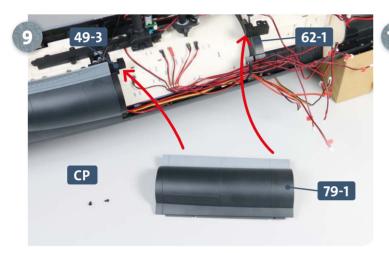
Turn the hull assembly round. You will continue work on connector **62-1**, which is located between the third and fourth compartments. Have ready the cable guide **81-4**.



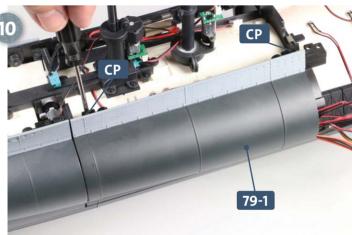
Clip the cable guide 81-4 onto the connector 62-1.



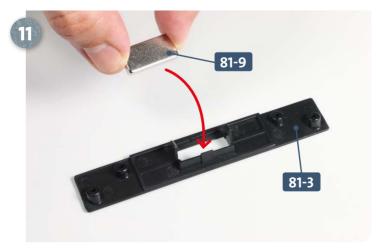
Guide the cables running along the lower part of the third compartment through the cable guide (as indicated by the arrow) one after the other. There is a small gap in the middle of guide **81-4** through which the cables pass.



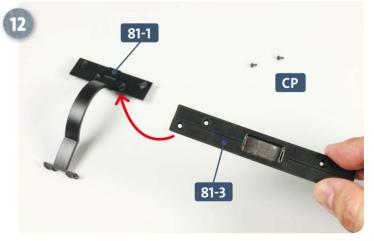
Have ready the left hull section **79-1** and two **CP** screws. Place the hull section level with the third compartment, between connectors **49-3** and **62-1**, as indicated by the arrows.



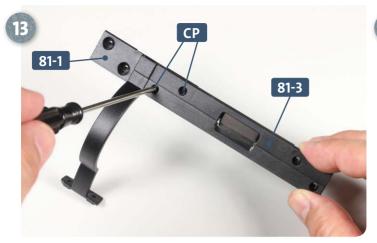
Attach the hull section **79-1** to the two connecting parts using one **CP** screw at each end, as shown above.



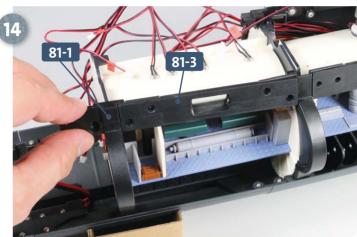
Place the mounting plate **81-3** back-side on your work surface. Take the magnet **81-9** and slot it into its holder on the mounting plate, as pictured.



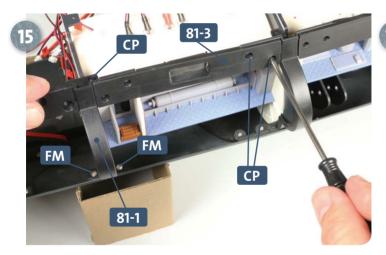
Place the aft end of the mounting plate **81-3** on the connector **81-1**, as indicated by the arrow. Have ready two **CP** screws.



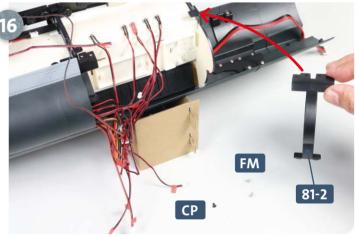
Fasten the mounting plate **81-3** to the connector **81-1** using two **CP** screws, as shown.



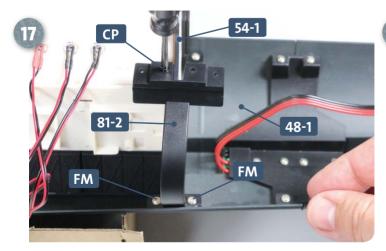
Turn the model round again so that the starboard (R) side may be accessed. Insert the mounting plate 81-3 into the connector at the forward end of the fourth compartment and attach the connector 81-1 at the aft end, as shown.



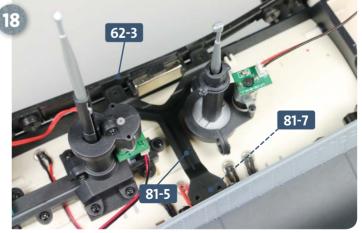
Fix the mounting plate 81-3 in place using two CP screws. The connector 81-1 is then attached using one CP screw and two FM screws as shown in the photo.



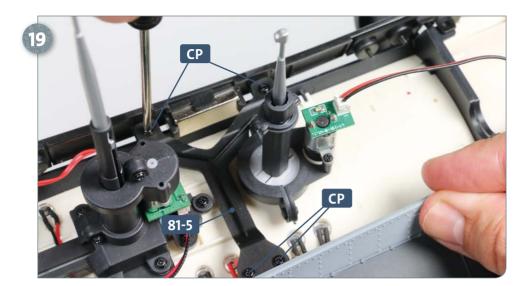
Move now to the port (L) side of the hull. Have ready two FM screws and one CP screw. Taking connector 81-2, fit it onto the aft bulkhead of the fourth compartment, as indicated by the arrow.



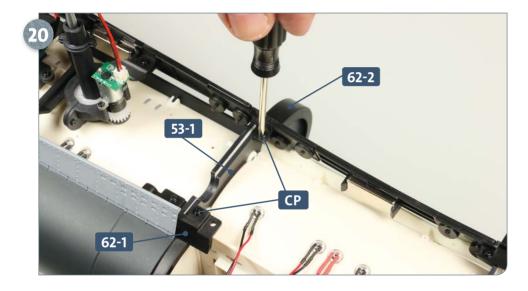
Attach the connector **81-2** to the bulkhead **54-1** using one **CP** screw and two **FM** screws into the hull section **48-1**.



The crossbeam **81-5** goes across the deckhead of the third compartment, bridging connector **81-7** with mounting plate **62-3**, as pictured above.

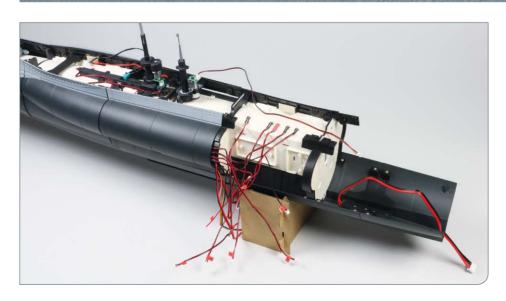


Fix the crossbeam 81-5 in place using four **CP** screws, as shown.



Fix connectors **62-1** and **62-2** to the forward bulkhead of the fourth compartment **53-1** using one **CP** screw for each.

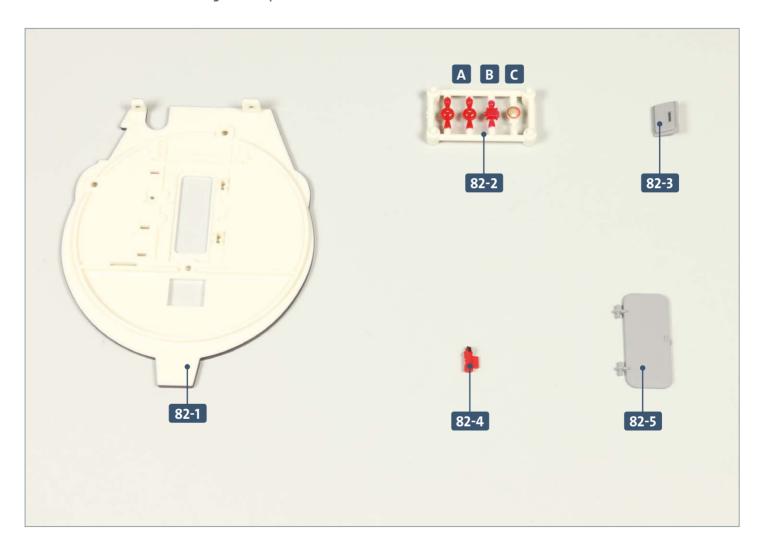
COMPLETED WORK



Work on the main hull section has progressed, with the addition of the fourth compartment, a hull plate and various connecting parts.

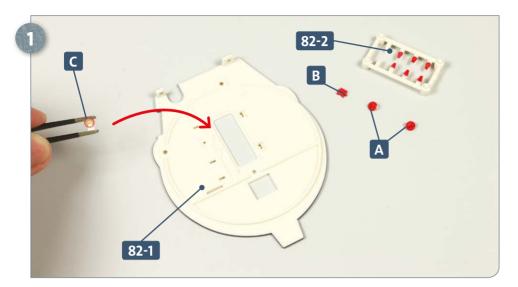
Kit 82: Electric motor room bulkhead

In this kit, you will begin work on the electrical motor and aft torpedo room, attaching handwheels, a fire extinguisher and other attachments including a soundproof door to the forward bulkhead.

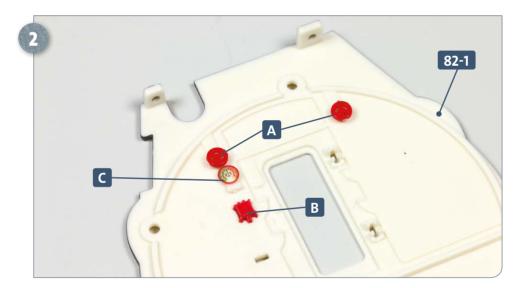


Parts reference list			
Part no.	Name		
82-1	Forward bulkhead (electric motor room)		
82-2	Frame (2 x A, B, C)		
82-3	Fire extinguisher bracket		
82-4	Fire extinguisher		
82-5	Soundproof door		

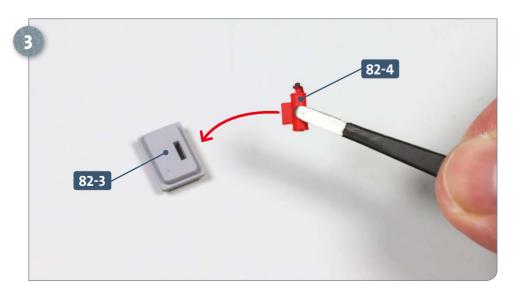
STAGE 1 → Forward bulkhead



Take the forward bulkhead 82-1 and frame 82-2. Detach the four pieces from the frame, as shown. Take part C, apply a little glue to the peg on the back and insert it into the slot indicated by the arrow, left.

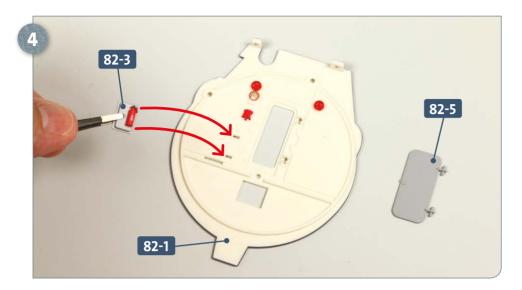


Next, glue the two handwheels **A** and attachment **B** to the bulkhead **82-1** as pictured, left.

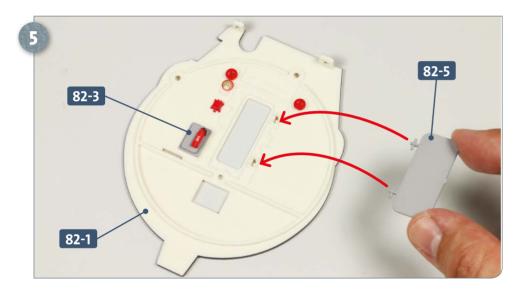


Take the fire extinguisher **82-4**. Apply some glue to the peg and insert it into the slot of the bracket **82-3**, as shown by the arrow.

Kit 82: Electric motor room bulkhead

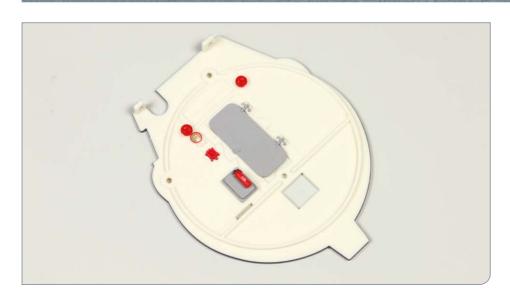


Apply some glue to the two pegs on the back of the bracket 82-3 and insert them into the corresponding slots in the bulkhead 82-1, as indicated by the arrows. Have ready the soundproof door 82-5.



Glue the bracket **82-3**, and attached fire extinguisher onto the bulkhead as pictured. Take the soundproof door **82-5**, and push-fit its hinges into their mounts on the bulkhead **82-1**, shown by the arrows.

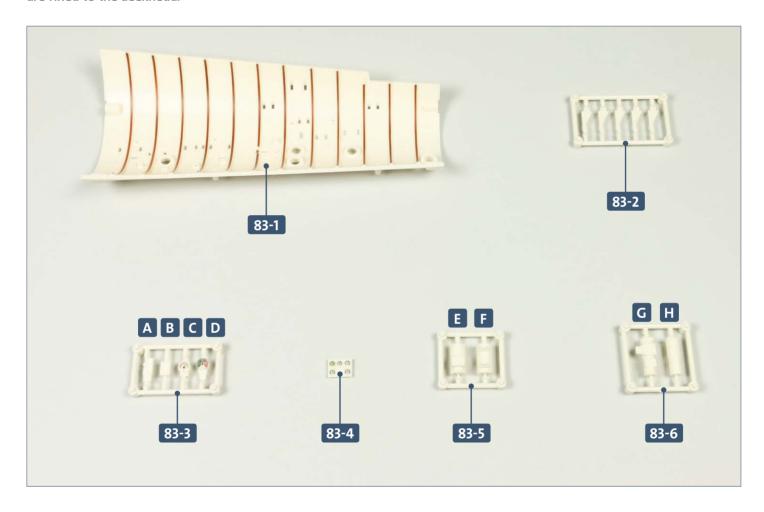
COMPLETED WORK



The forward bulkhead for the electric motor room has now been furnished with various attachments.

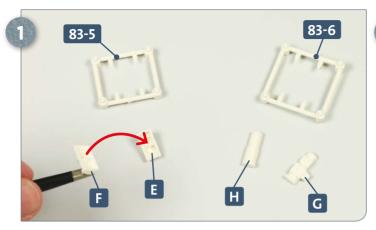
Kit 83: Electric motor room deckhead

In this kit, work on the electric motor room continues with the deckhead. Converters, a telegraph and other attachments are fixed to the deckhead.

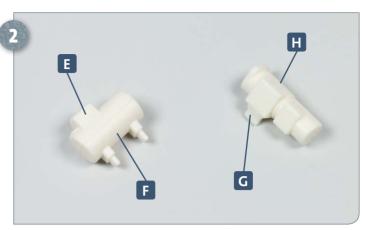


Parts reference list			
Part no.	Name		
83-1	Electric motor room deckhead		
83-2	Converter brackets		
83-3	Frame (A, B, C, D)		
83-4	Pressure gauge		
83-5	Converter (E, F)		
83-6	Converter (G, H)		

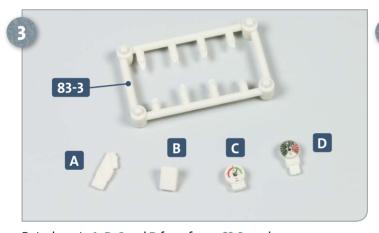
STAGE 1 → Electric motor room deckhead



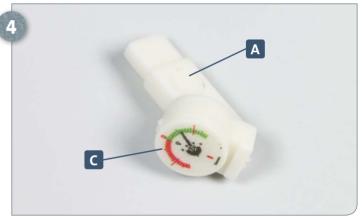
Take frames 83-5 and 83-6. Detach the converter parts E, F, G and H from the frames. Apply a little glue to the raised socket of F and fit it onto the peg of part E, as indicated.



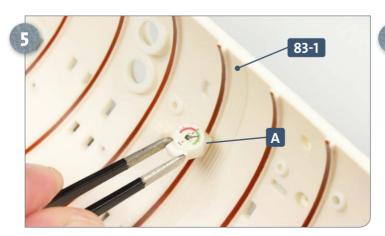
Parts **E** and **F** form the first converter. After test-fitting, repeat the process to join **G** and **H** and create the second converter, as pictured above.



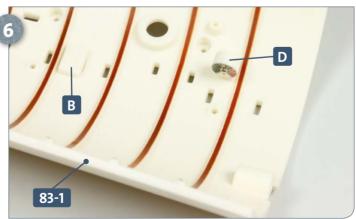
Detach parts A, B, C and D from frame 83-3, as shown.



Apply some glue to the wider peg of part **A** and insert it into the slot on the back of the display, **C**.

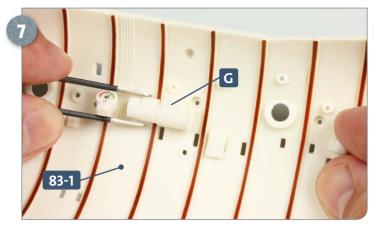


Apply some glue to the end of part $\bf A$ and insert into the recess in the deckhead panel $\bf 83-1$ as shown.

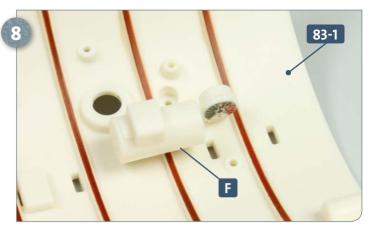


Glue part **B** and the telegraph (**D**) to the forward end of the deckhead **83-1**, as pictured.

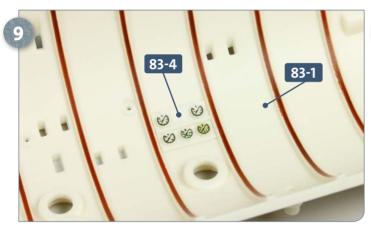
Kit 83: Electric motor room deckhead



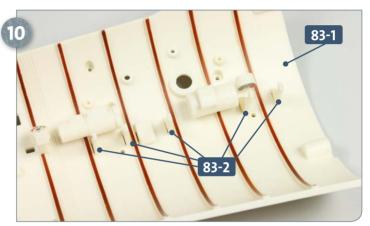
Take the longer of the two assembled converters, apply some glue to the peg of part **G** and insert it into the slot on the deckhead panel **83-1**.



Apply some glue to the two pegs on the back of the second converter **F** and insert them into the two slots in the forward section of the deckhead panel **83-1**.

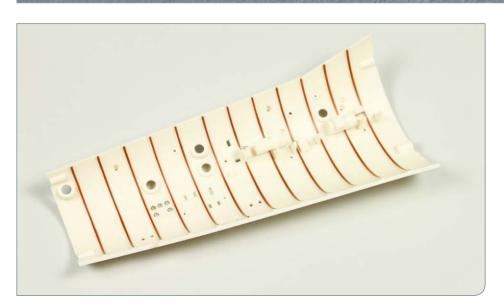


Take the pressure gauge 83-4. Apply some glue to the back, and glue it in the position shown above at the aft end of the deckhead panel 83-1.



Glue the five brackets 83-2 to the forward section of the deckhead 83-1, as pictured.

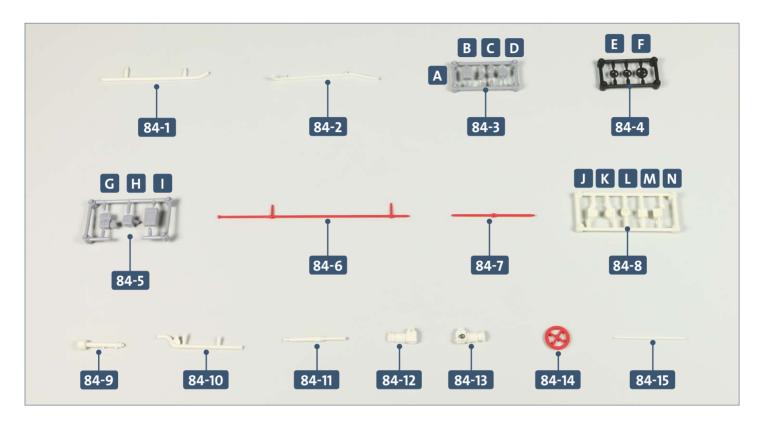
COMPLETED WORK



Two converters and various other components have been attached to the deckhead of the electric motor room.

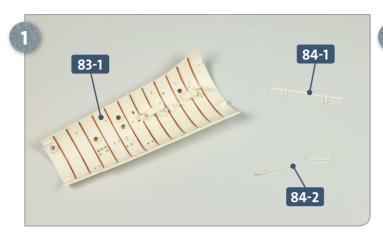
Kit 84: Main rudder motor

In this kit, various components are added to the deckhead of the electric motor room, including power and compressed air lines, control rods and various other attachments. The main rudder motor is assembled and fitted with drive shafts.

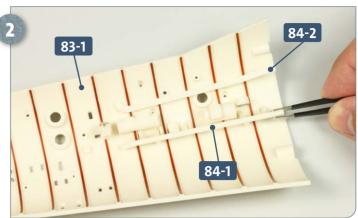


Parts reference list		
Part no.	Name	
84-1	Compressed air line	
84-2	Power line	
84-3	Attachments (A, B, C, D)	
84-4	Handwheels (2 x E, F)	
84-5	Attachments (G, H, I)	
84-6	Control rods for ventilation system	
84-7	Control rods for ventilation system	
84-8	Attachments (J, K, L, M, N)	
84-9	Emergency rudder column	
84-10	Compressed air line	
84-11	Drive shaft	
84-12	Main rudder motor	
84-13	Main rudder motor	
84-14	Emergency rudder hand wheel	
84-15	Drive shaft	

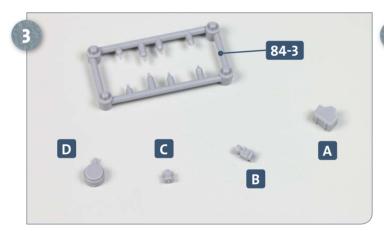
STAGE 1 → Motor room deckhead and main rudder motor



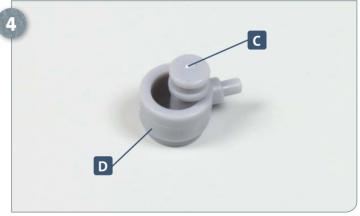
Place the electric motor room deckhead panel 83-1 and both lines 84-1 and 84-2 on your work surface.



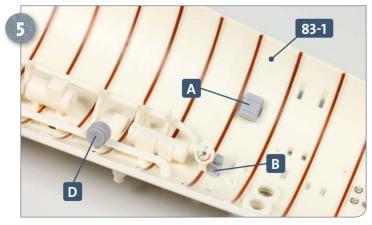
Apply some glue to the pegs on the back of the compressed air lines **84-1** and **84-2** and insert them into the corresponding holes in the deckhead panel **83-1**.



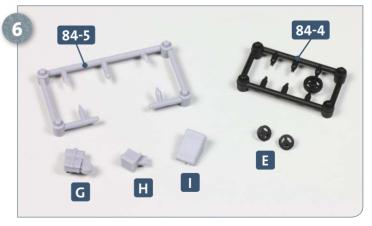
Take frame 84-3 and detach the four attachment pieces A, B, C and D.



Apply some glue to the peg of part **C** and insert it into the hole of part **D**, as shown above.



Glue attachments $\bf A, B$ and $\bf D$ to the deckhead panel 83-1, as shown in the photo.

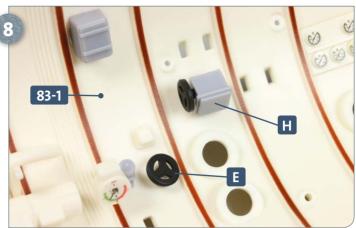


Take frames **84-4** and **84-5** and detach parts **G**, **H** and **I** and the two handwheels **E**.

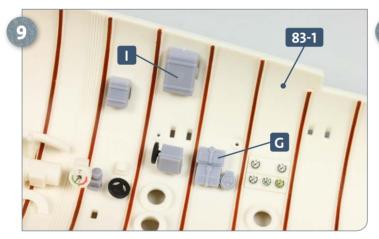
Kit 84: Main rudder motor



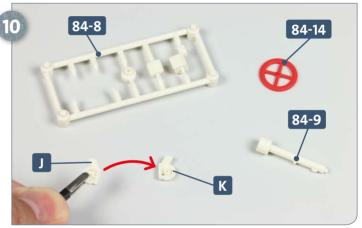
Apply some glue to the peg on one of the two handwheels **E** and insert it into the hole in attachment **H**.



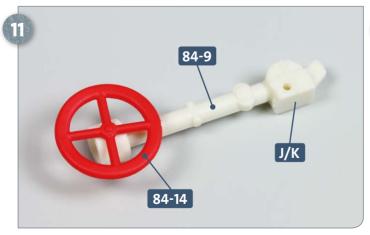
Glue attachment H and the second handwheel E to the deckhead panel 83-1, as pictured.



Apply glue to the two pegs on the back of attachment parts **G** and I and insert them into the corresponding slots in the deckhead panel **83-1**.



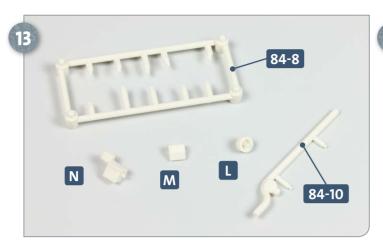
Take handwheel **84-14** and the emergency rudder column **84-9**. Separate the two attachments **J** and **K** from frame **84-8**. Apply glue to the peg of **J** and insert into the raised socket of **K**, as shown.



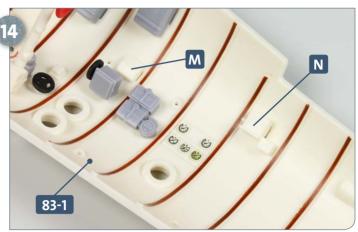
Apply a little glue to the peg of the handwheel **84-14** and fit it into the hole at the end of the column **84-9**, as shown. After applying glue to the peg at the other end of the column **84-9**, insert it into the slot in the attachment assembly J/K.



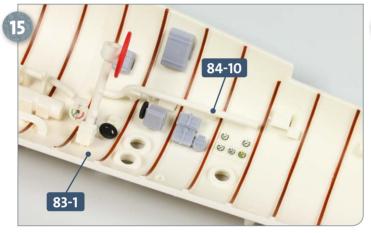
Apply some glue to the wider tab of attachment J/K and insert into the slot in deckhead panel 83-1, as shown in the photograph.



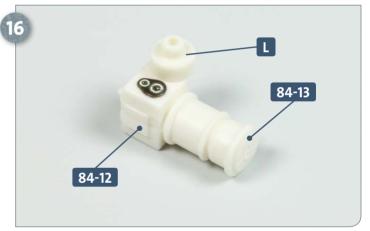
Take the compressed air line **84-10** and separate the remaining attachments, **L**, **M** and **N** from frame **84-8**.



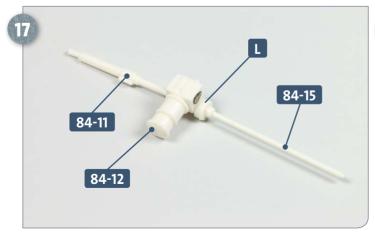
Apply glue to the two pegs on the back of the two attachments M and N and insert into the slots in the deckhead panel 83-1.



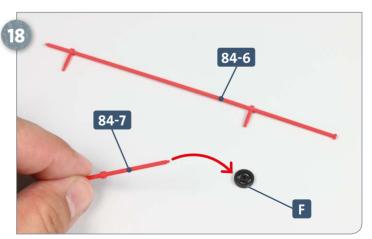
Apply some glue to the two pegs on the compressed air line **84-10** and insert into the holes in the deckhead panel **83-1**, as shown above.



Take the two halves of the main rudder motor, **84-12** and **84-13**, and glue them together. Apply glue to the peg on attachment piece L and insert into the socket of part **84-13**.

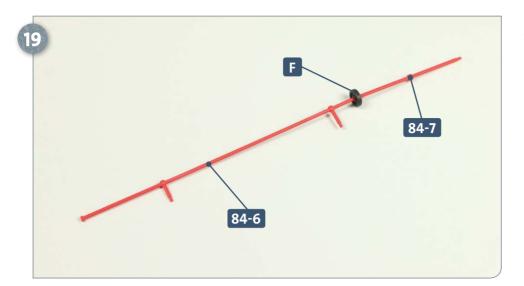


Glue the longer peg of drive shaft **84-15** into the hole of attachment **L**, and the wider end of drive shaft **84-11** into the hole of the main rudder motor **84-12**, as shown above.

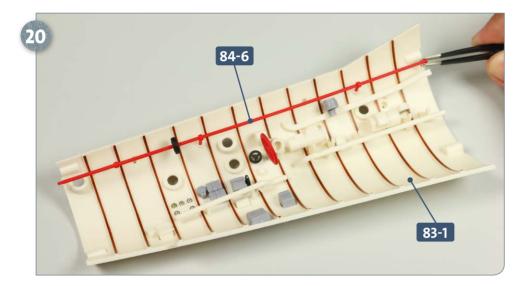


Separate the handwheel **F** from frame **84-4**. Apply some glue to the shorter peg of control rod **84-7** and insert into the hub of the handwheel, as pictured. Have ready control rod **84-6**.

Kit 84: Main rudder motor

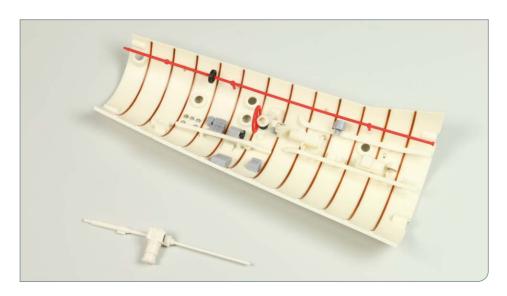


Once the control rod **84-7** has been attached to the handwheel **F**, glue the narrow end of control rod **84-6** to the other side of the handwheel, as pictured.



Apply some glue to the two pegs of control rod **84-6** and insert them into the holes in the deckhead panel **83-1**.

COMPLETED WORK



The deckhead of the electric motor room has now been further embellished with new components. The main rudder motor has been assembled and fitted with a control rod. This will be installed in the motor room in kit 91.