

USG U-BOAT

Pack 6Kits 21-24

20 15 10 5



BUILD THE ICONIC WORLD WAR II U-BOAT

U 96 U-BOAT

Pack 6
Assembly
Instructions

Kit 21: Forward crew quarters

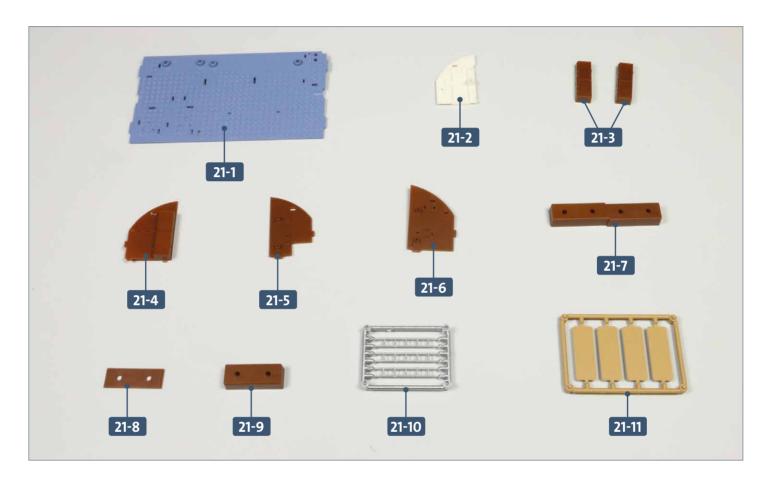
Kit 22: Commander's quarters

Kit 23: Radio room & listening room

Kit 24: Forward PCB

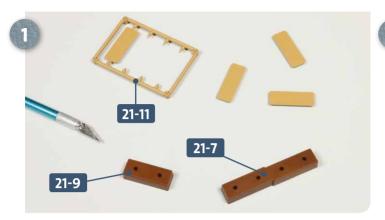


In this kit you will begin the assembly of the forward crew quarters. Bunks are assembled and then installed, then room dividers are fitted with lockers and bunk rails before being added to the assembly.

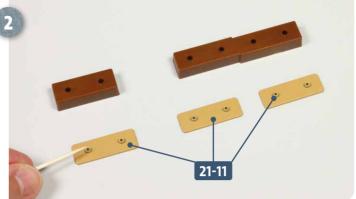


Parts reference list				
Part no.	Name			
21-1	Forward crew quarters deck			
21-2	Toilet bulkhead			
21-3	Lockers			
21-4	Room divider			
21-5	Room divider			
21-6	Room divider			
21-7	Bunk frame			
21-8	Bunk spacer			
21-9	Bunk frame			
21-10	Bunk rails			
21-11	Four bunks			

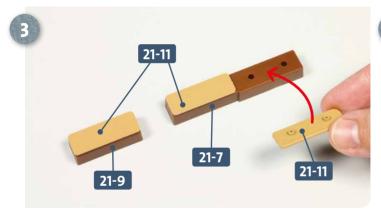
STAGE 1 → Forward crew quarters



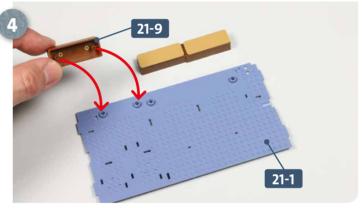
Take both bunk frame parts, 21-7 and 21-9. Separate three of the bunks from frame 21-11 as shown above.



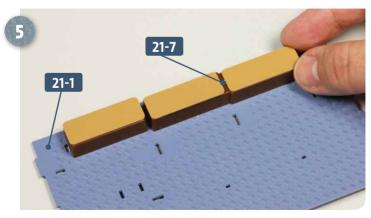
Turn the three bunks 21-11 so that their undersides are facing upwards and apply a little glue to each of the two pegs, as shown in the photo.



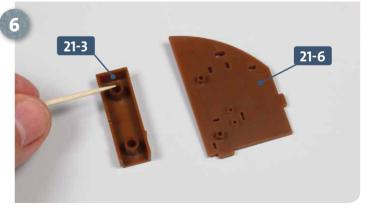
Fit the first bunk 21-11 onto bunk frame 21-9. The two remaining bunks 21-11 are fitted onto bunk frame 21-7, as shown above.



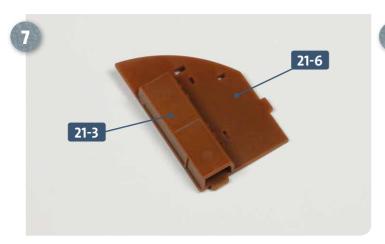
Place the forward bunk room deck 21-1 on your work surface as shown above. Apply glue to the two pegs on the underside of the bunk frame 21-9 and attach to the bunk room deck in the position indicated by the arrows, above.



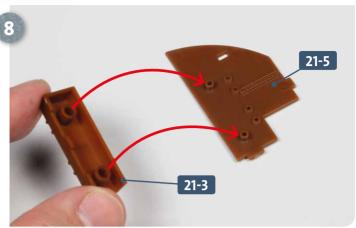
Attach the double bunk frame 21-7 to the deck 21-1 in the same way, as shown.



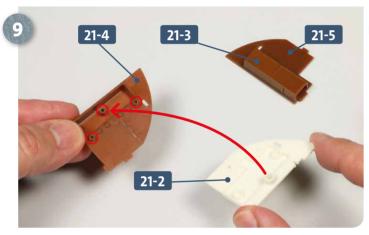
Take room divider **21-6**. Place one of the lockers **21-3** next to it, the inside facing up. Add some glue to the two raised sockets inside the locker.



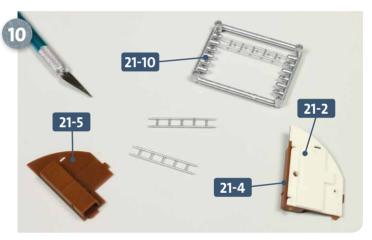
Glue locker 21-3 to the room divider 21-6, as shown in the photo.



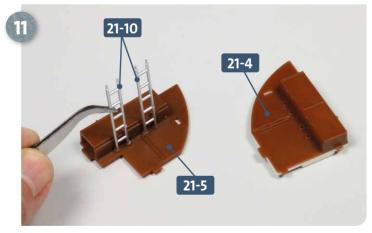
Repeat the process with room divider 21-5 and the second locker 21-3: add some glue to the raised sockets and join the two parts together as shown.



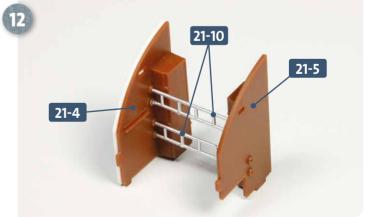
The photo shows the locker 21-3 attached to room divider 21-5. Now take the toilet bulkhead 21-2 and room divider 21-4: apply some glue to their raised sockets (circled) and join the parts as shown by the arrow.



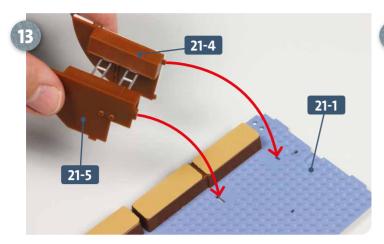
Next, take room divider **21-5** and detach two of the bunk rails from frame **21-10**, as shown. Take care not to accidentally remove the pins at the end of the rails.



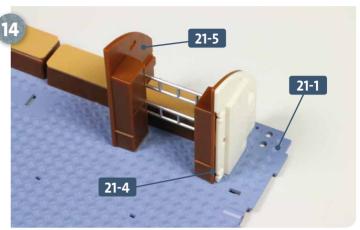
Glue the ends of the two bunk rails 21-10 into the recesses in the room divider 21-5, as shown above. Have ready the room divider assembly 21-4.



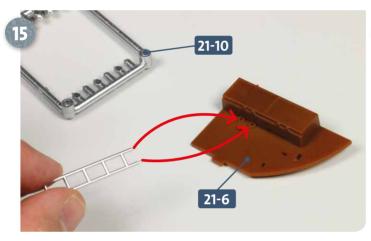
The other ends of the two bunk rails **21-10** are then glued into the four holes in room divider **21-4**.



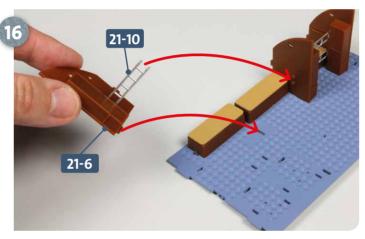
Apply some glue to the pegs at the bottom of the room dividers **21-4** and **21-5** and insert them into the corresponding slots in the bunk room deck **21-1**, indicated by the arrows.



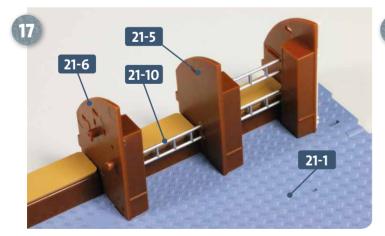
The photograph shows the completed bunk room deck assembly with added room dividers. Make sure that the bottom edges of the dividers 21-4 and 21-5 are in full contact with the deck.



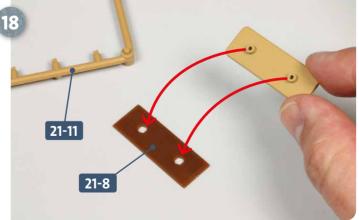
Take the room divider 21-6 and detach the remaining bunk rail from its frame 21-10. Apply some glue to the ends of the rail and insert these into the corresponding holes in the room divider as indicated by the arrows, above.



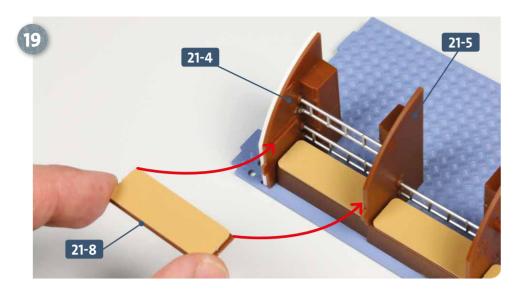
Apply some glue to the lower edges of the room divider **21-6** and to the free ends of the bunk rail **21-10** and attach to the bunk room deck assembly, as shown above.



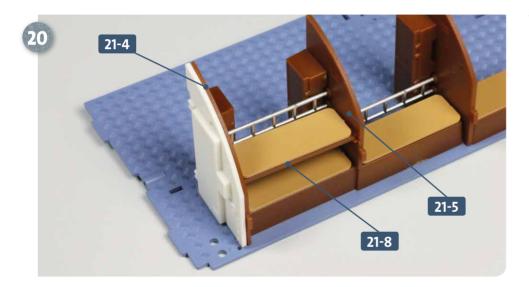
The photo shows the room divider 21-6 attached to the deck 21-1. The free ends of the bunk rail 21-10 fit into the corresponding holes in the next divider 21-5.



Take the bunk spacer 21-8 and detach the remaining bunk from frame 21-11. Apply some glue to the pegs underneath the bunk and fit into the spacer, as shown.

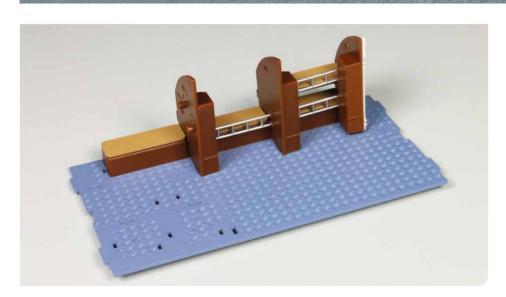


Add some glue to the channels on the two room dividers 21-4 and 21-5 and insert the bunk spacer 21-8 between the two, as shown left.



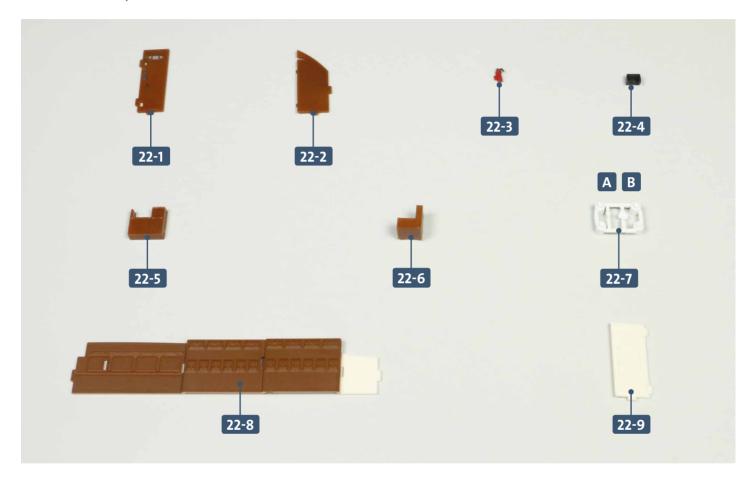
The photo shows the single bunk 21-8 fitted in position between the two room dividers, 21-4 and 21-5.

COMPLETED WORK



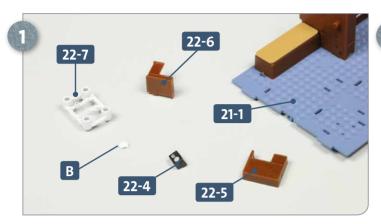
The initial forward bunk room assembly, complete with bunkers and lockers.

A bunk area for the commander is added and equipped with electronics, and the crew quarters receive a toilet door and another bulkhead panel.

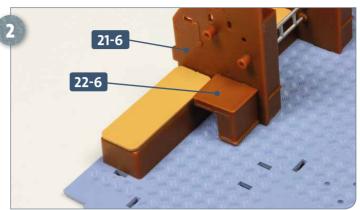


Parts reference list			
Part no.	Name		
22-1	Door to circuit breaker cabinet		
22-2	Room divider		
22-3	Fire extinguisher		
22-4	Radio		
22-5	Locker		
22-6	Bedside table		
22-7	Frame (A = toilet roll holder, B = lamp)		
22-8	Bulkhead cladding, forward crew quarters		
22-9	Toilet door		

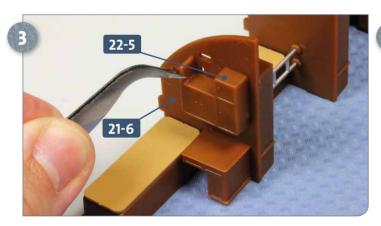
STAGE 1 \rightarrow Construction of the cabin area



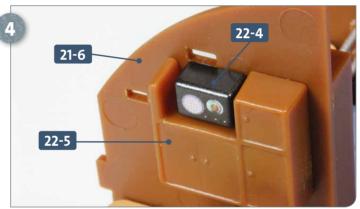
Place the forward crew quarters assembly 21-1 on your work surface. Work starts with the commander's quarters: take the radio 22-4, lockers 22-5 and bedside table 22-6 and detach the lamp B from frame 22-7.



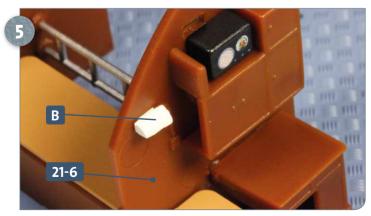
Apply some glue to the tabs on the back of the table 22-6 and insert these into the slots in the room divider 21-6, as shown.



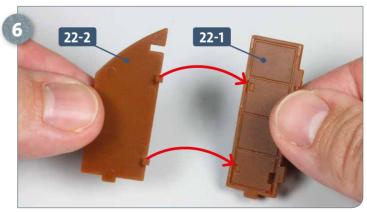
Next, the lockers **22-5** are attached to the room divider **21-6**. Add some glue to the raised sockets on part **21-6** before joining together as shown above.



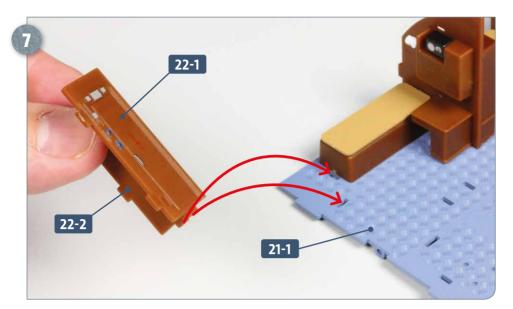
The radio 22-4 fits into the recess at the top of the lockers 22-5. Apply a little glue to the pegs at the back and insert them into the slots in the room divider 21-6.



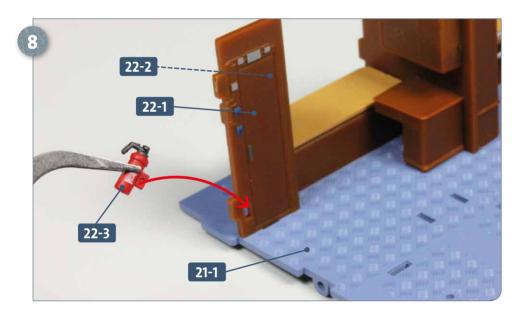
The lamp **B** is glued into the slit to the left of the lockers on the outer edge of the room divider **21-6**, as shown.



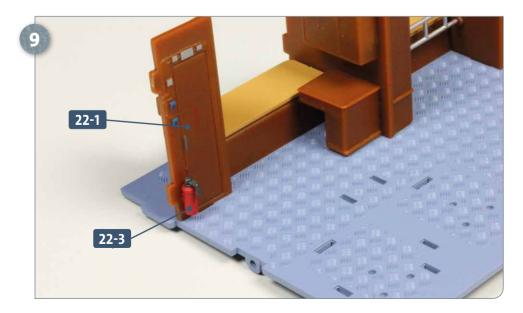
Take the circuit breaker door **22-1** and the room divider **22-2**. Add some glue to the contact points of each part and fit them together at right angles, as indicated by the arrows. See also the next step.



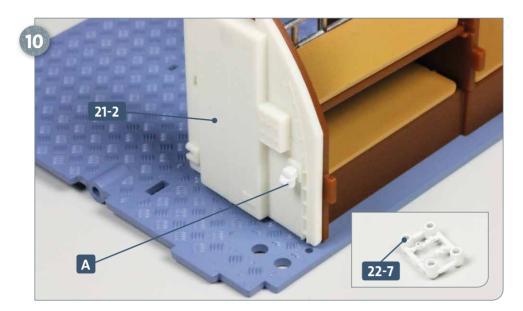
Apply some glue to the pegs at the bottom of the door 22-1 and the room divider 22-2 and fit these into the corresponding slots in the bunk room deck 21-1, as indicated by the arrows.



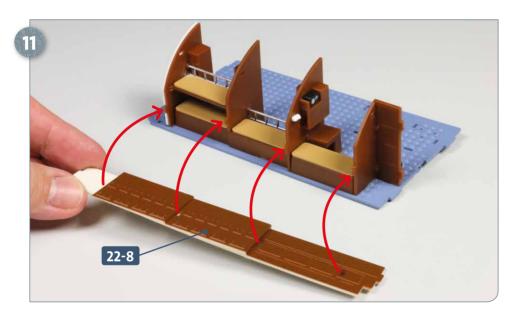
The assembly comprising the door 22-1 and the room divider 22-2 is now attached to the deck 21-1. Take the fire extinguisher 22-3, add some glue to the tab on the back, and fit this into the slot at the bottom of the door 22-1, as indicated by the arrow.



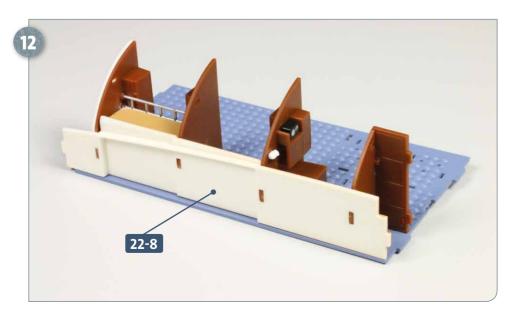
The photo shows the fire extinguisher **22-3** glued in place on the door **22-1**.



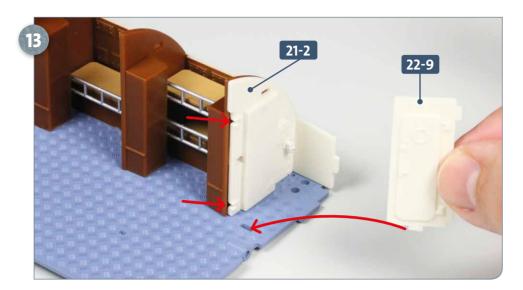
We will now switch to working on the opposite end of the forward crew quarters. Separate the toilet roll holder A from frame 22-7. Apply some glue to the small peg and fit this into the slot in the toilet bulkhead 21-2.



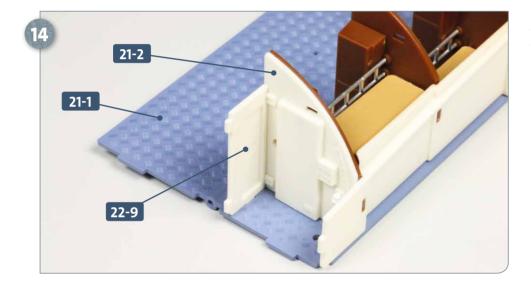
After test-fitting, add some glue to the pegs on the back of each of the four room dividers. Take the bulkhead panelling part 22-8 and fit it onto the room dividers, as indicated by the arrows, left.



The bulkhead panelling **22-8** is correctly installed when its slots fit fully onto the four tabs of the room dividers, as shown.

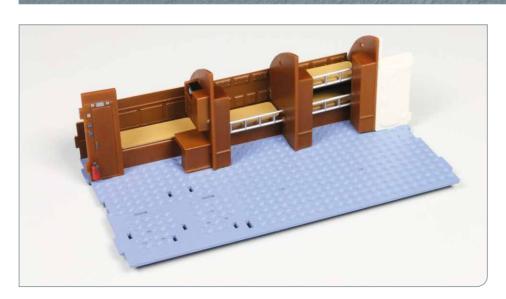


Test-fit the toilet door **22-9** as shown by the arrow and in the next step. If necessary, use side cutters or similar, to remove the lower hinge. Once sure of a good fit, glue in place.



The photo shows the toilet door fitted into the bunk room deck and attached to the toilet bulkhead **21-2**.

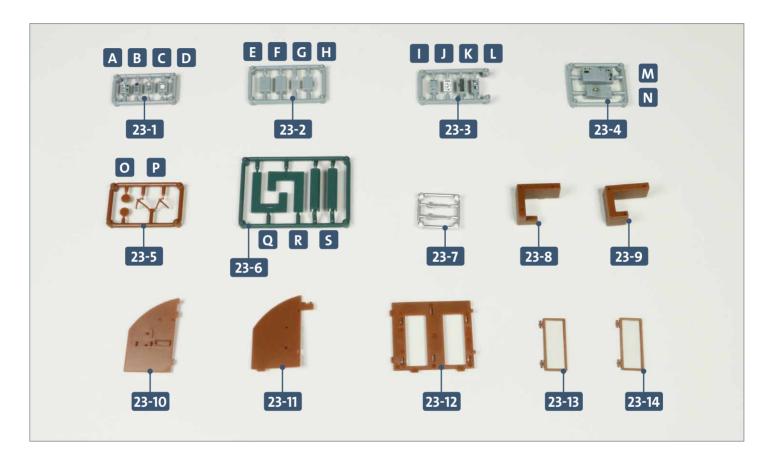
COMPLETED WORK



The forward crew quarters assembly has had the commander's bunk fitted out, as well as the toilet.

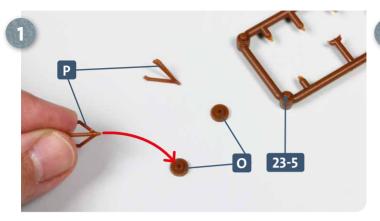
Kit 23: Radio room & listening room

The furniture and bulkheads for the radio and listening rooms are assembled and installed in the forward crew quarters. The rooms are then fitted with various pieces of equipment.

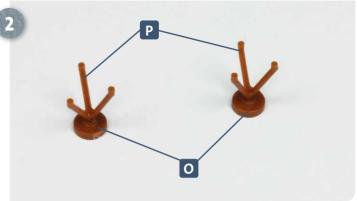


Parts reference list				
Part no.	Name			
23-1	Frame with equipment (A, B, C, D)			
23-2	Frame with equipment (E, F, G, H)			
23-3	Frame with equipment (I, J, K, L)			
23-4	Frame with equipment (M, N)			
23-5	Frame with stool parts (2 x O, 2 x P)			
23-6	Frame with table and bench tops (Q, R, 2 x S)			
23-7	Bench legs			
23-8	Radio room table			
23-9	Listening room table			
23-10	Partition bulkhead (radio/listening room)			
23-11	Partition bulkhead (listening room)			
23-12	Door frame			
23-13	Radio room door			
23-14	Listening room door			

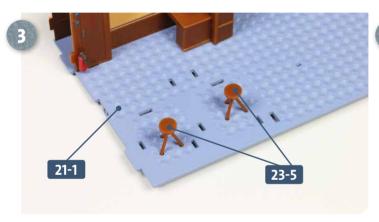
STAGE 1 → Radio and listening room furniture



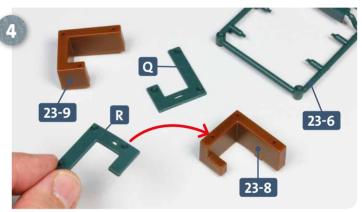
Detach the stool seats O and legs P from frame 23-5. Apply some glue to the peg at the apex of one leg piece P and insert into the recess in the underside of one of the seats O, as shown.



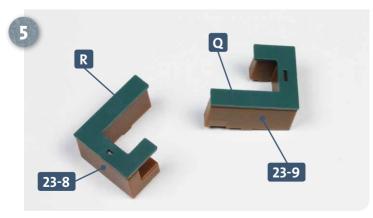
Repeat the process with the second parts **P** and **O**. The photo shows the resulting two identical stools, fully assembled.



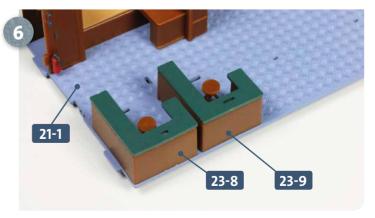
Place the forward bunk room assembly on your work surface. Apply some glue to the bottom of the legs of the two stools **23-5** and fit these into the corresponding holes in the deck **21-1**, as shown in the photo.



Remove the two tabletops **Q** and **R** from frame **23-6** and locate the two tables, **23-8** and **23-9**. Apply glue to the pegs on the underside of the tabletop **R** and fit it onto the table **23-8**, as shown by the arrow above.

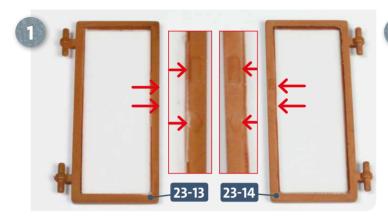


Repeat the process with tabletop **Q** and table **23-9**. The photo shows the two assembled tables.

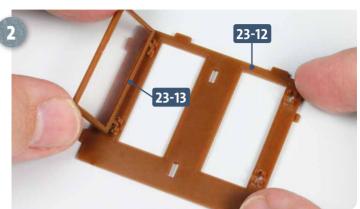


Apply some glue to the pegs on the underside of both tables 23-8 and 23-9 and attach them to the bunk room deck 21-1, as shown in the photo.

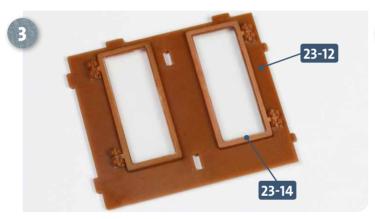
STAGE 2 \rightarrow The door frame and room partitions



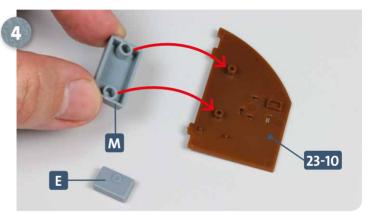
Arrange the radio room door 23-13 and listening room door 23-14 as shown above. On both doors, the raised rectangle should be above the diamond shape as shown by the arrows in the inset photo.



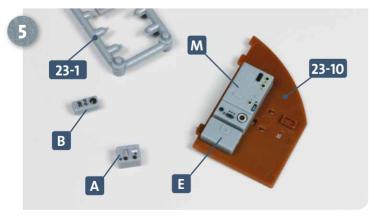
Place the door frame 23-12 on your work surface, oriented as shown. Push-fit the radio room door 23-13 into the left hinge of the door frame, as pictured above.



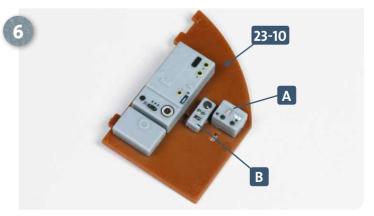
The listening room door 23-14 push-fits into the right-hand hinge in the door frame 23-12, as shown in the photo. Both doors should retain movement.



Take partition, 23-10. Remove part E from frame 23-2 and part M from frame 23-4. Apply some glue to the back of M and fit it onto the large pegs on partition 23-10, as indicated by the arrows.

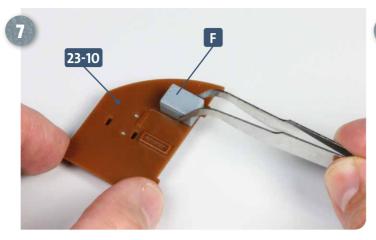


Attach part E to the partition 23-10 beneath part M. Next, remove parts A and B from frame 23-1.

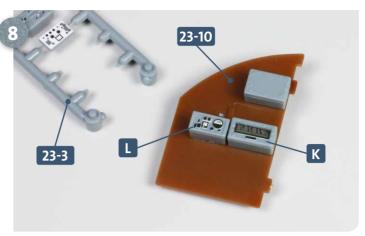


Attach parts **A** and **B** to partition **23-10**: apply some glue to the back of the parts and fix in position, as shown.

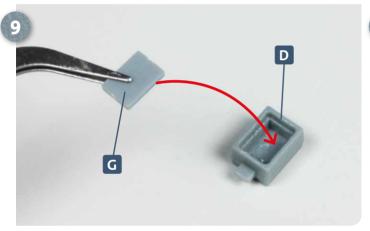
Kit 23: Radio room & listening room



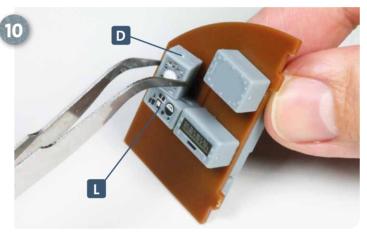
Turn the room divider 23-10 over. Separate part F from frame 23-2. Add some glue to the back and attach it to the room divider 23-10, as shown above.



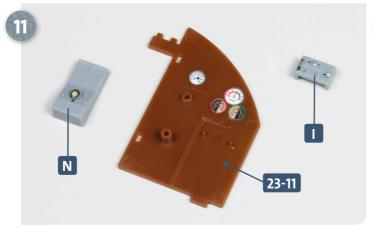
Two more parts are glued to the room divider: parts **K** and **L**, from frame **23-3**.



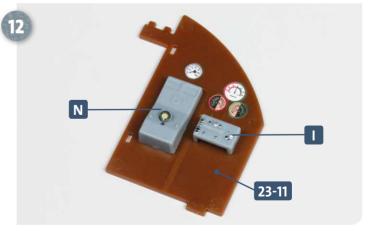
Detach part **G** from frame **23-2** and part **D** (including side tab) from frame **23-1**. Glue part **G** into the opening of part **D**, as shown.



Add some glue to the tab at the bottom of part ${\bf D}$ and insert this into the outer angled slot at the top of part ${\bf L}$, as shown above.

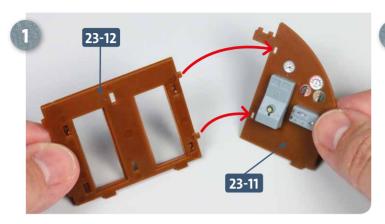


Now take partition 23-11 and place it on your work surface as shown above. Take part I from 23-3 and part N from frame 23-4.

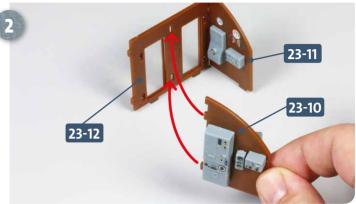


Glue parts I and N to the corresponding pegs on the listening room bulkhead partition 23-11.

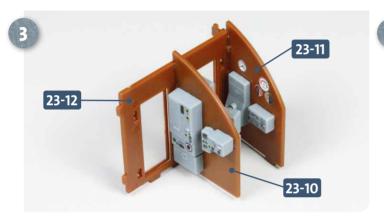
STAGE 3 ightarrow Installing the partitions and doors



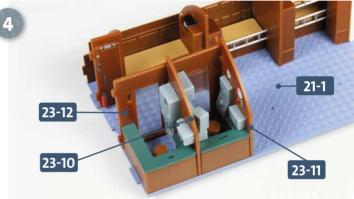
Align the listening room partition 23-11 with the door frame 23-12 as shown. Apply glue sparingly to the contact surfaces of both parts and join together as indicated by the arrows.



With the listening room partition 23-11 attached to the door frame 23-12, take partition 23-10, apply glue sparingly to its contact surfaces, and fit it onto the door frame 23-12, as shown.



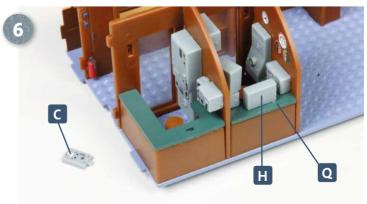
The structure comprising the door frame 23-12 and both partition bulkheads 23-10 and 23-11 for the radio and listening rooms is complete.



Apply some glue to the bottom edges and the lower pegs of the door frame 23-12, and partitions 23-10 and 23-11, and attach the assembly to the deck of the forward crew quarters 21-1.

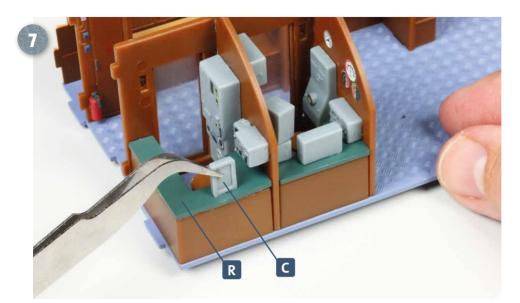


Detach part H from frame 23-2 and part J from frame 23-3. Apply some glue to the edges of J and fit inside the opening of H, as shown in the photo above.

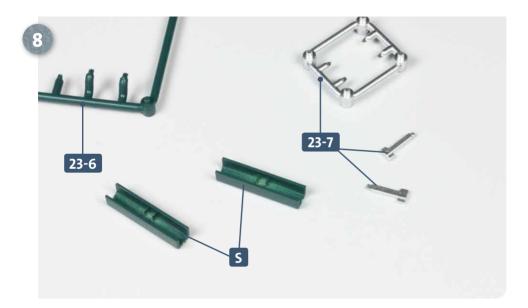


Attach part H to the tabletop Q in the listening room: apply some glue to the tab at the bottom of H and fit it into the slot in the tabletop. Next, remove part C from frame 23-1.

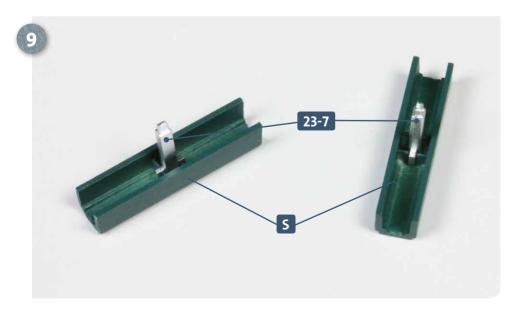
Kit 23: Radio room & listening room



Apply some glue to the peg of **C** and insert this into the slot in the tabletop **R** in the radio room, as shown.

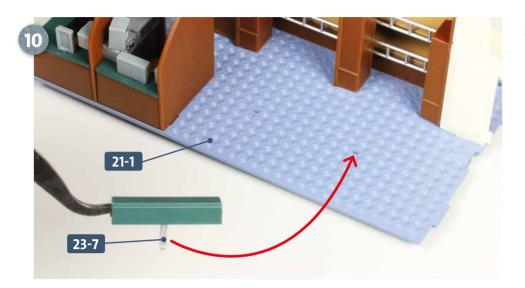


Remove the two bench tops **5** from frame **23-6** and both legs from frame **23-7**. Take care not to accidentally cut off the tabs at the end of the legs.

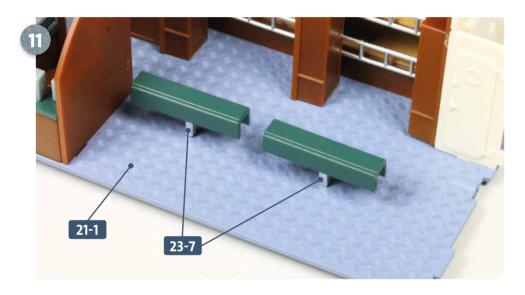


Apply some glue to the top of each of the legs 23-7 and fit these to the underside of each bench seat 5.

Kit 23: Radio room & listening room



Apply some glue to the bottom of one of the bench legs 23-7 and insert it into the slot in the bunk room deck 21-1, indicated by the arrow.



The first bench 23-7 is attached to the deck 21-1. Repeat the process to glue the leg of the remaining bench 23-7 into the adjacent slot, as shown.

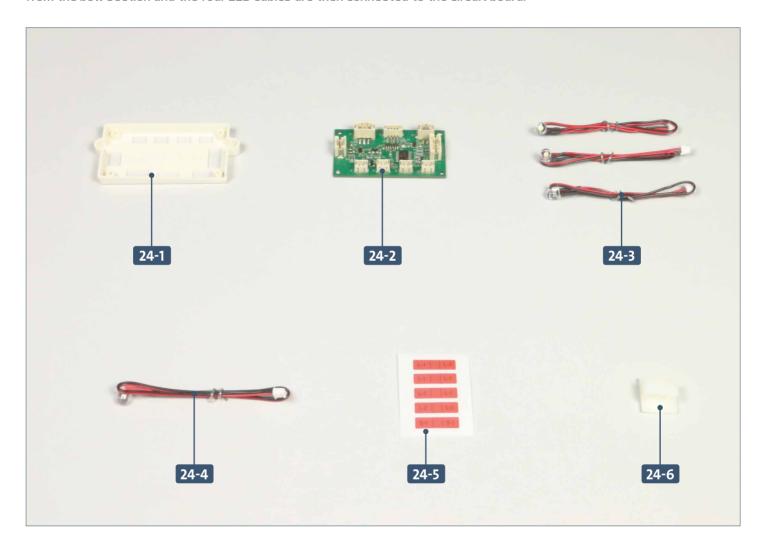
COMPLETED WORK



The forward crew quarters assembly has progressed: both the radio and the listening rooms have been assembled, furnished and installed, along with two bench seats.

Kit 24: Forward PCB

The four supplied LED cables are tested, then the forward PCB (Printed Circuit Board) is mounted on the model. The cables from the bow section and the four LED cables are then connected to the circuit board.

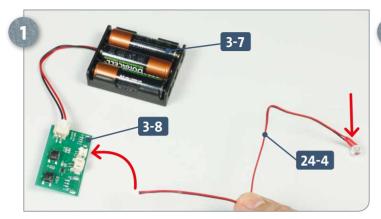


Parts reference list				
Part no.	Name			
24-1	PCB cover			
24-2	PCB			
24-3	3 cables with white LEDs			
24-4	Cable with red LED			
24-5	Cable labels			
24-6	Cable clip			

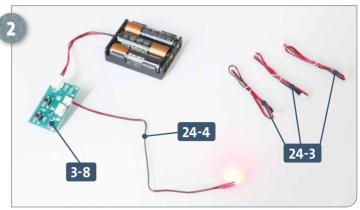


Screws				
Ref	No.	Dimensions		
AP	6+1	2 x 4 mm		

STAGE 1 \rightarrow Testing the LEDs

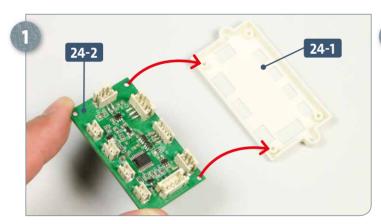


You will need the battery compartment 3-7 with the test PCB 3-8 connected. Take the red LED cable 24-4 (red sleeving as shown by the arrow) and connect it to the small socket on the board.

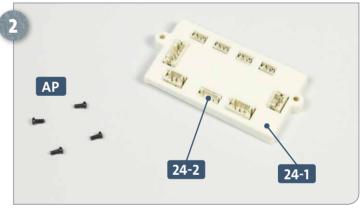


When the cable **24-4** is connected to the socket on the test PCB **3-8**, the red LED should light up. Repeat the test with the three white LED cables **24-3**. Take care when removing the plugs not to pull them by the wires; lever out with tweezers.

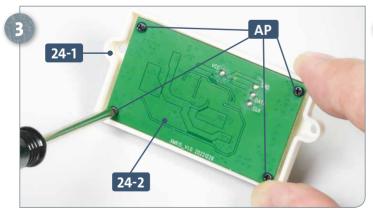
STAGE 2 Assembling the PCB and connecting the cables



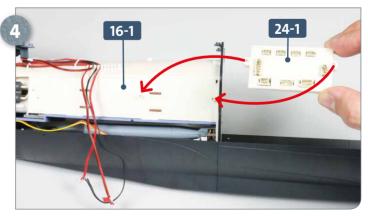
Place the circuit board cover **24-1** on your work surface as shown. Take the PCB **24-2** and fit it into the casing, as indicated by the arrows.



The PCB **24-2** is correctly seated in its cover **24-1** when the sockets are securely fitted within the slots, as shown. Have ready four **AP** screws.

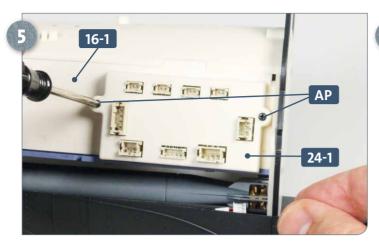


Turn the assembly over and attach the PCB **24-2** to the cover **24-1** using four **AP** screws.

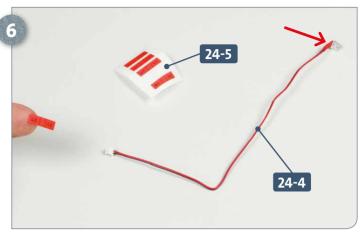


Place the model on your work surface. Offer up the PCB cover **24-1** to the two mounts on the outer side of the bow compartment bulkhead **16-1**.

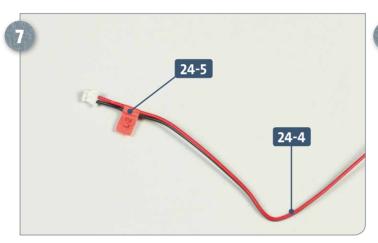
Kit 24: Forward PCB



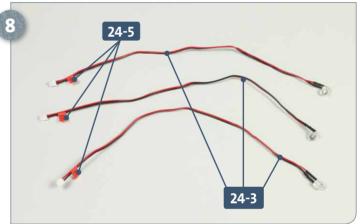
Fix the PCB cover 24-1 in place on the bow compartment bulkhead 16-1 using two AP screws. Take care not to over-tighten the screws.



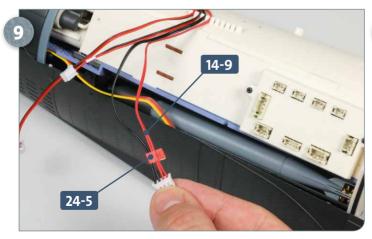
Prepare the cable with the red LED **24-4**. It can be identified by the red sleeving, indicated by the arrow. Peel the cable label **L-2** from its backing sheet **24-5**, as shown.



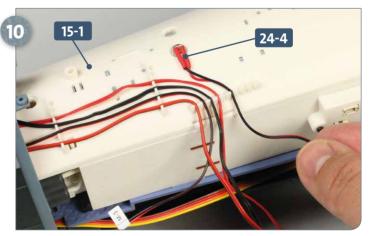
Attach the cable label **24-5** (L-2) to the cable, approximately 8mm from the connector end of the LED cable **24-4**.



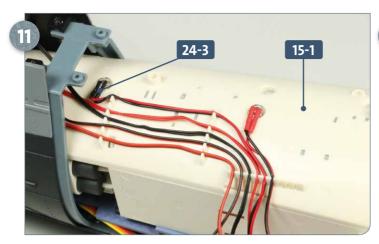
Attach a cable label 24-5, (L-1), to each of the cables for the white LEDs 24-3 (these have black sleeving). Again, attach the labels approximately 8mm from the connector end of the cables.



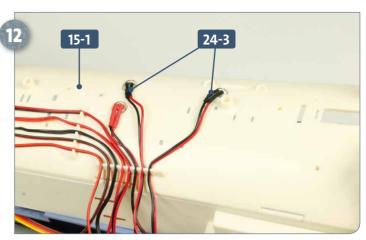
Attach the cable label 24-5 (S-1) to the cable for the limiting switch 14-9. Again, attach it approximately 8mm from the terminal.



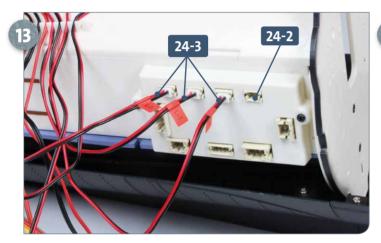
Insert the red LED **24-4** into the hole in the bow compartment deckhead **15-1** as shown. Route the cable through a slot in the cable guide, leaving a gap between it and the cable to the left.



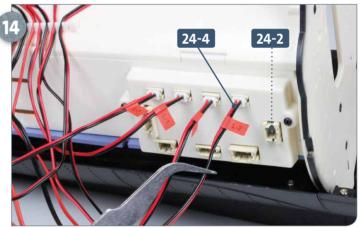
Now take one of the white LED cables **24-3**. Fit the LED in to the forwardmost hole in the bow compartment deckhead **15-1**. Route the cable through all three guides, as shown in the photo above.



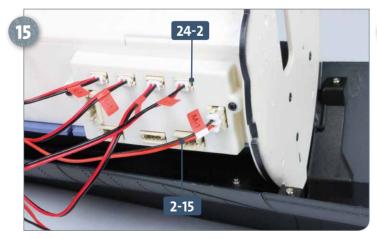
Insert the two other white LEDs **24-3** into the remaining free holes in the bow compartment deckhead **15-1**. Both cables **24-3** are routed through the lateral cable guide only.



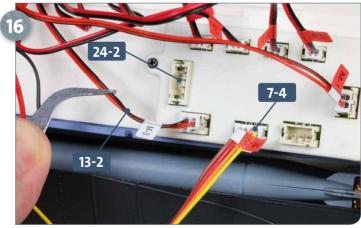
Now the cables are connected to the PCB **24-2**. The three cables **24-3** labelled **L-1** go first, inserted into sockets 1, 2 and 3 on the circuit board. (The order doesn't matter.)



Cable **24-4** labelled **L-2** connects to socket 4 of the PCB **24-2** as shown in the photo.

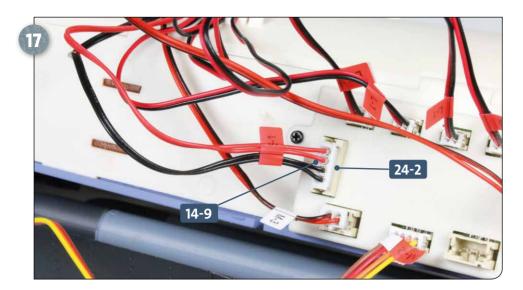


Cable 2-15 labelled M-1 connects to socket 5 of the PCB 24-2. Note: Socket 6 remains unused for now.

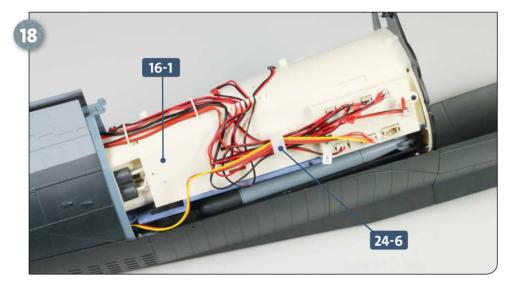


Cable 7-4 labelled M-2 connects to socket 7 of the PCB 24-2, and cable 13-2 labelled M-3 goes into socket 8.

Kit 24: Forward PCB

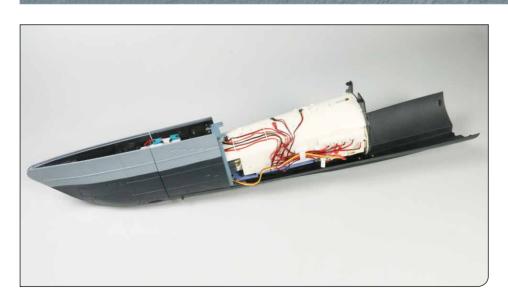


Finally, cable **14-9** labelled **S-1** connects to socket 9 of the PCB **24-2**, as shown.



Remove the protective film from the cable clip **24-6** and attach it to the bulkhead of the bow compartment **16-1**. Insert the cables into the clip one at a time so that they are bundled near the circuit board, as shown.

COMPLETED WORK



The first PCB has been installed in the model, and the cables from the bow area have been connected to it.