

21317 Steamboat Willie P12502

- **P12502 is the unique code of lighting set, we use this to accurately identify the product you purchased and the corresponding manuals and services you need to obtain. Please make sure your product code is the same as the label on the back of the box shown “21317 P12502”.**
- **Installation requires a lot of patience and great observation that your LEGO bricks will come alive when you get this finished. The bricks with lighting as below, so make sure you're ready and let's get started.**



Strategies for the Installation

This instruction divides three sections to complete the installation of the lighting set.

Section A: Check the type and quantity of components.

The quantity and type of components of each products are different and it needs to be carefully checked to make sure there do have enough material. The type of components is indicated by the label on the bag.

Section B: Test that each components is working properly.

Each components is made individually so it is necessary to test that each components is working properly to avoid the situation that the lighting does not work .

Section C: laying out components following the instruction.

Our material is very small but not fragile, just be reminded that don't to pull the wires too hard. For different people, there may be some installation steps that you can't understand. Please look at the previous and later installation step

Section A: Check the type and quantity of components.

There are 9 bags in this set. The name and quantities of specific components are as shown , please check carefully.

Label	Content	Quantity
Bit Lights-15CM-Warm White	Bit Lights-15CM-Warm White	11
Bit Lights-15CM-Blue	Bit Lights-15CM-Blue	2
Headlights-30CM-Warm White	Headlights-30CM-Warm White	1
Expansion Board	6 Socket Expansion Board	2
	8 Socket Expansion Board	1
USB Power Cable	USB Power Cable-30CM	1
Connecting Cables-5CM	Connecting Cables-5CM	1
Connecting Cables-30CM	Connecting Cables-30CM	2
Remote Control Board	Remote Control Board	1
Parts package		

Please contact us immediately if there have any missing components.

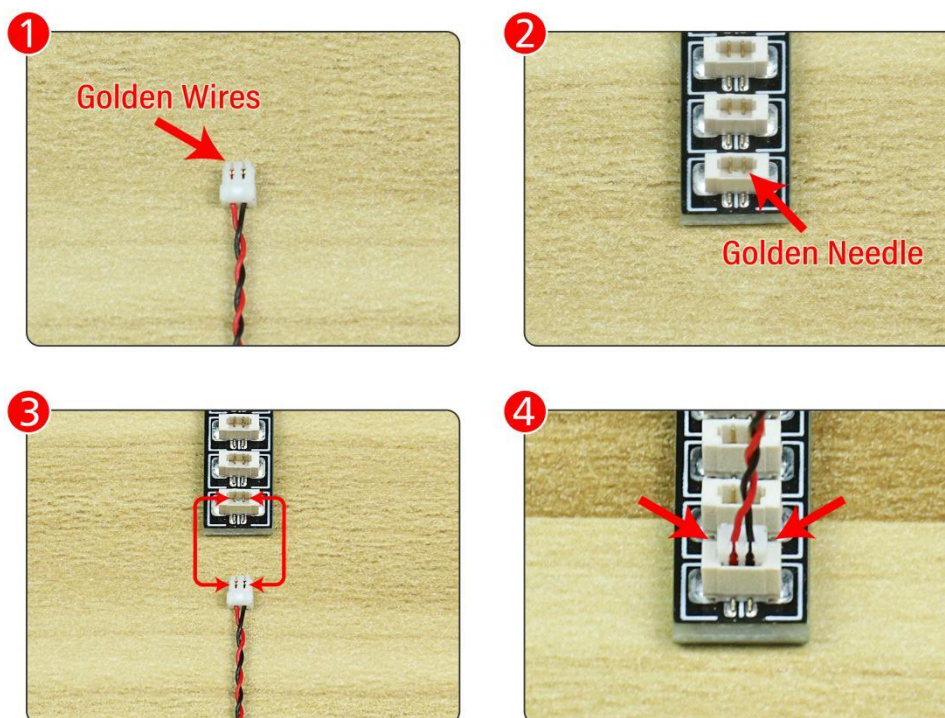
Section B: Test that each components is working properly.

We need a structure to test all lights, so take out the bag with label “USB Power Cord”and “Expansion Boards”as follows.



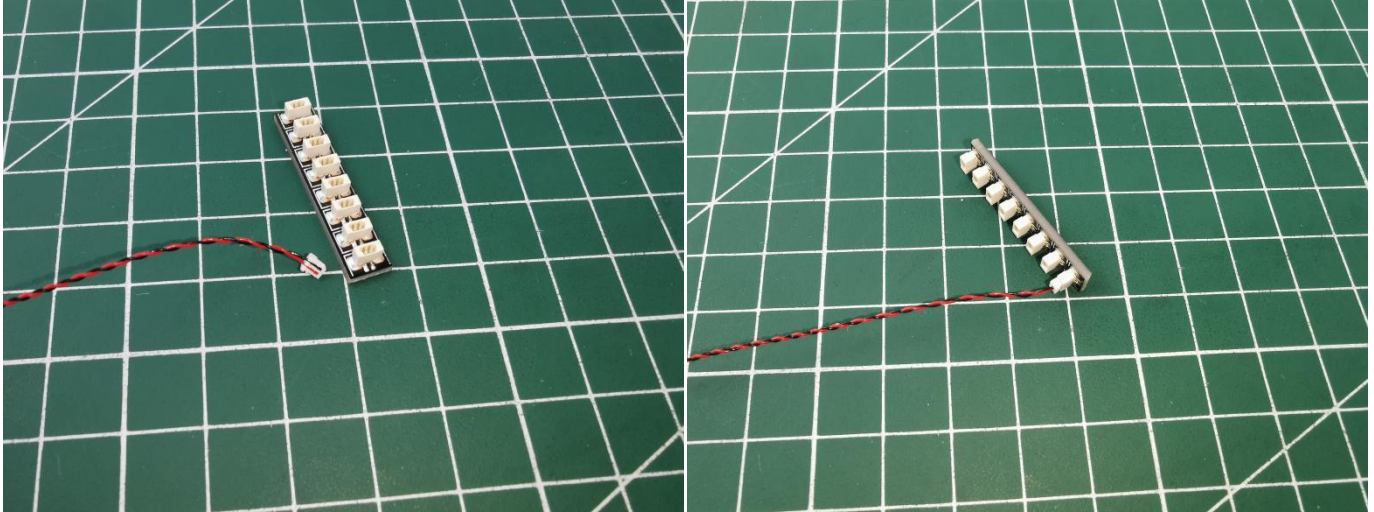
It is worth reminding that our products are all customized. They have a unique way of connecting. The white plug on wire and the socket of the expansion board need to be connected together to transmit power.

Note that on one side of the white plug you can see two very small golden wires that should be connected to the two golden needles in socket of the expansion board.shown as blow.



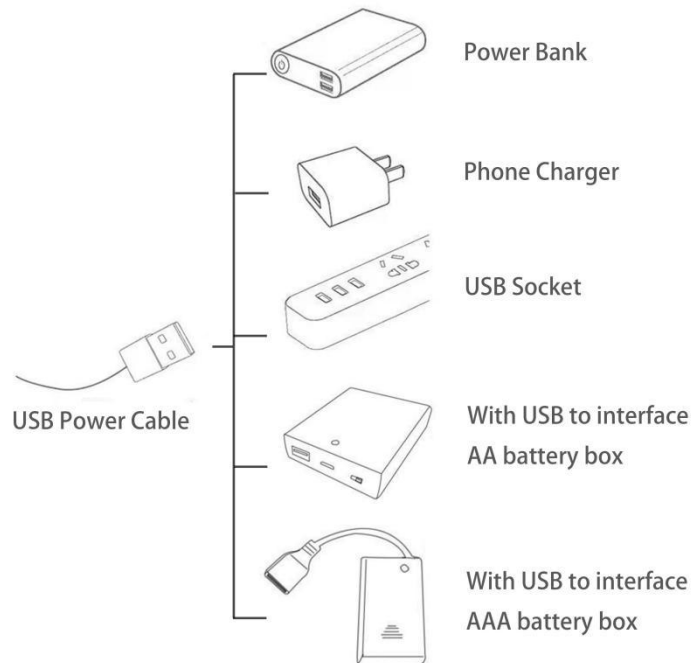
All our connections between plug and socket are all the same as shown above. So for any such structure with plug and socket, please pay attention to the golden wire of the plug and the golden needle of the socket, they must be touched together.

The connection method between the USB Power Cord and Expansion Boards is as follows:



The USB Power Cord can be powered by phone chargers, power banks, etc.

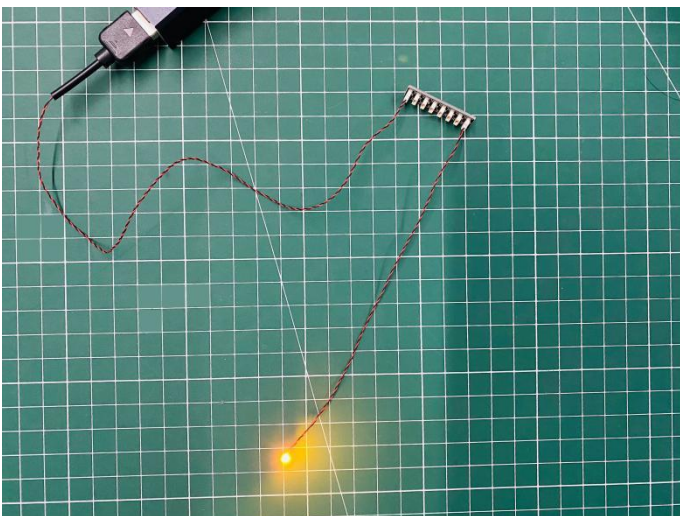
USB connectors to connect devices



This instruction will use the power bank as power supply . The test structure is shown as follow. All lamp in this set will be tested by this structure.



when we test "Bit Lights-15CM-Warm White" particles,Take out the bag labelled "Bit Lights-15CM-Warm White".Take out one of the light and connect it to the socket. Turn on the power bank, the light will turn on normally as shown below.



Test each lamp according to this method. It should be noted that after the test, the lamp must be returned to the corresponding bag to avoid confusion of types.

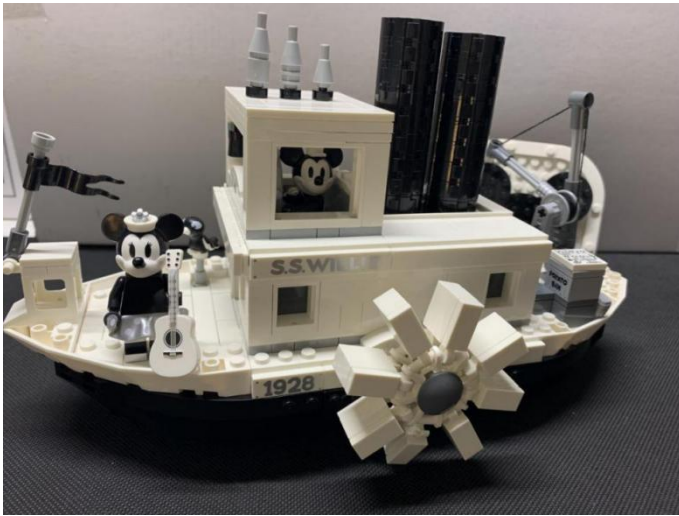


The components needs to be tested in this set is 10*Bit Lights-15CM-Warm White,2*Bit Lights-15CM-Blue,1*Headlights-30CM-Warm White.

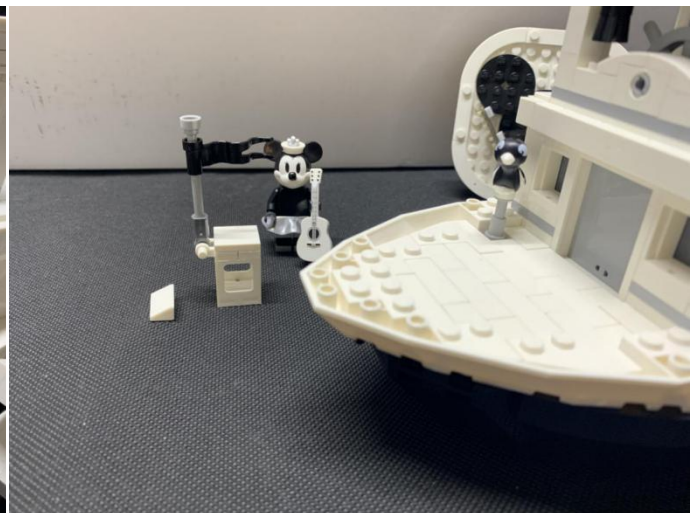
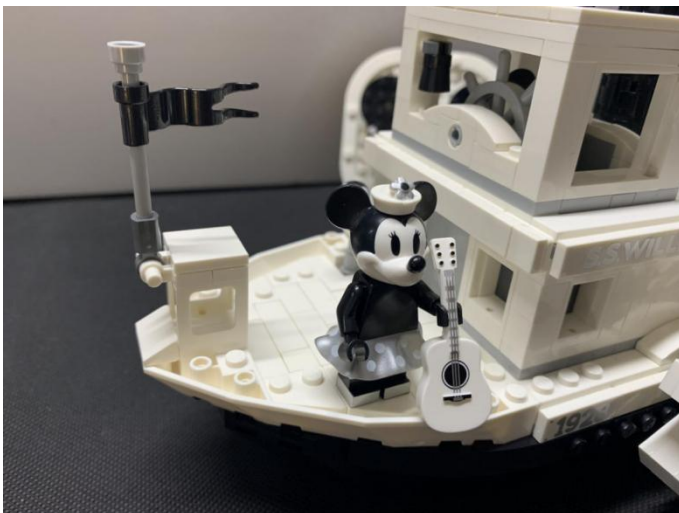
Please contact us immediately if any components don't work.

Section C: laying out components following the instruction.

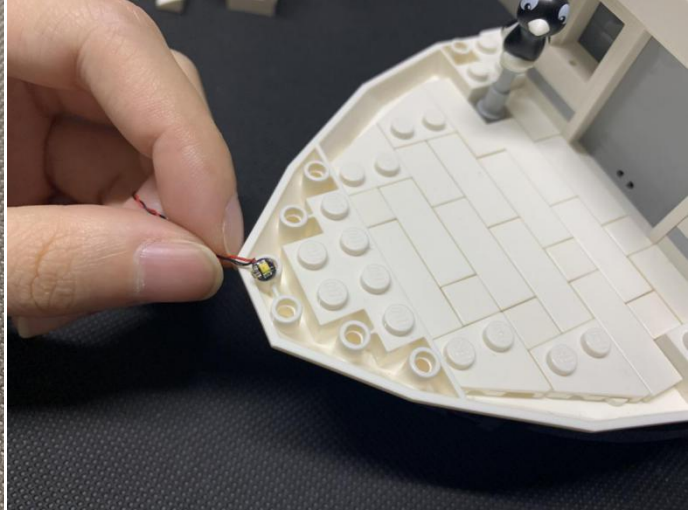
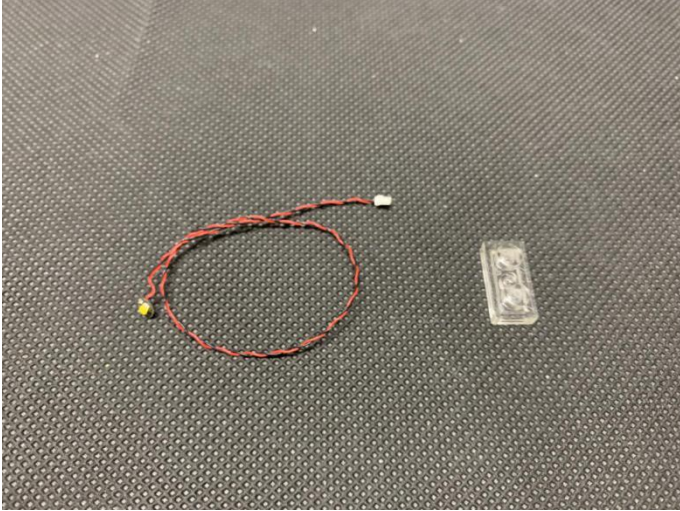
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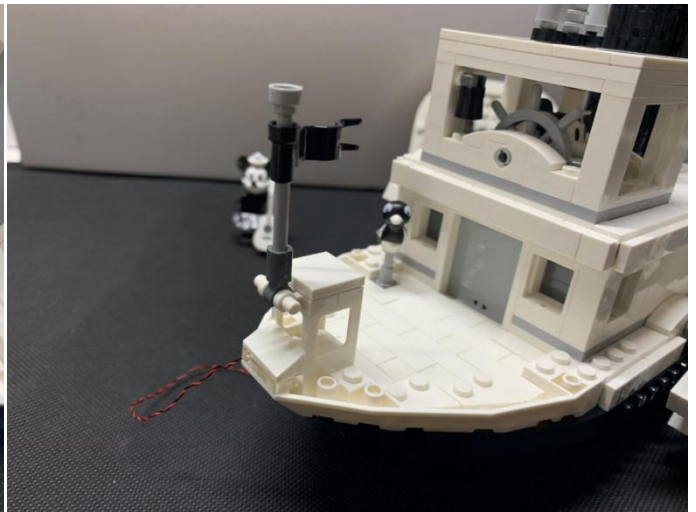
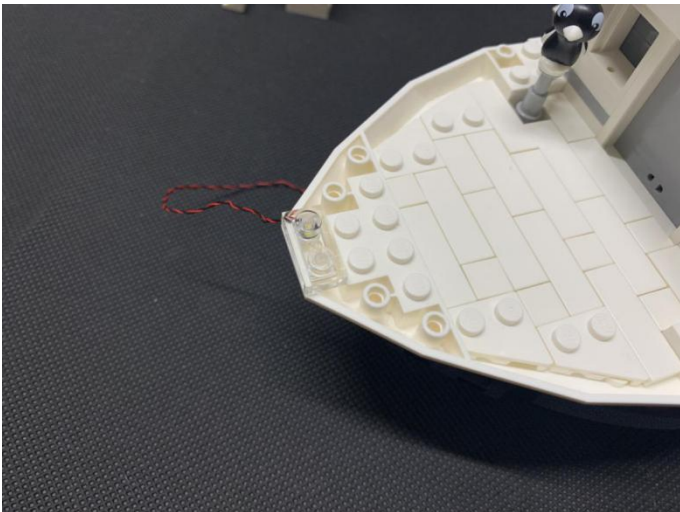
2.Begin with the head. Remove the flag and the following pieces.



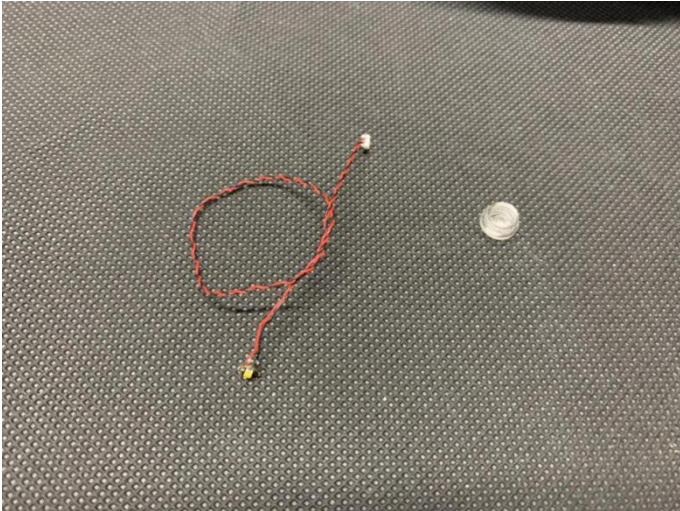
3. Take a 15cm warm white dot light, a trans 1x2 plate, with lighting part facing up, secure the light to the following place by connecting the trans plate over. Connect the white 1x2 slope plate over the trans plate. Reconnect other pieces.



4



5. Take a warm white 15cm dot light, a white 1x1 trans round plate.

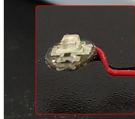


Tips

The plate without slit:

The plate without slit:

The squeeze causes the protective layer of the wire to be torn apart, the positive and negative wires touch together, and the set is short-circuited, and the hot wire is crushed, the wire to be disconnected and don't work.



The plate with slit:

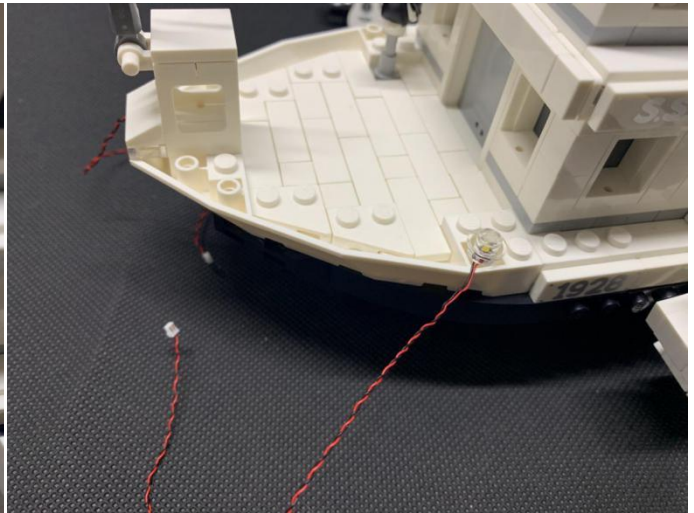
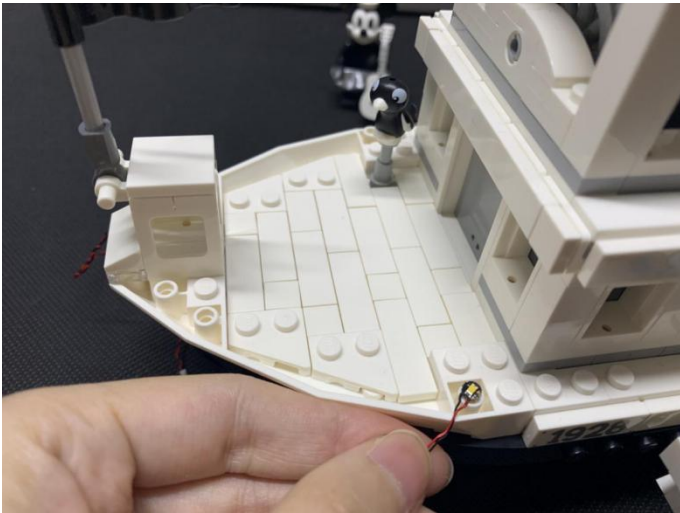
The plate with slit:

The wire has enough space to avoid being squeezed, endowed with longer service life and more stable effect.

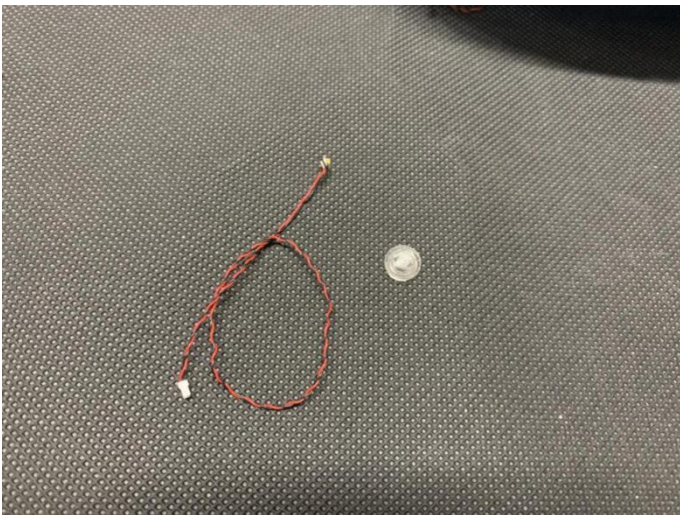


The slit on the the plate round 1X1 are hand-made to avoid squeeze the wire and cause short circuit and abnormal heat during installation.

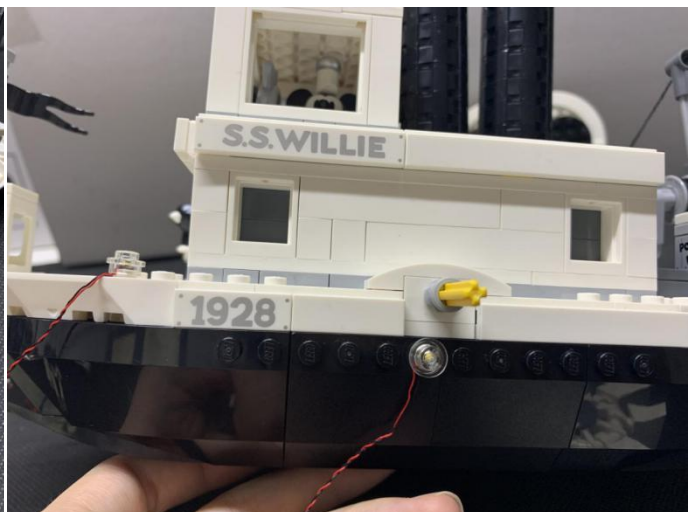
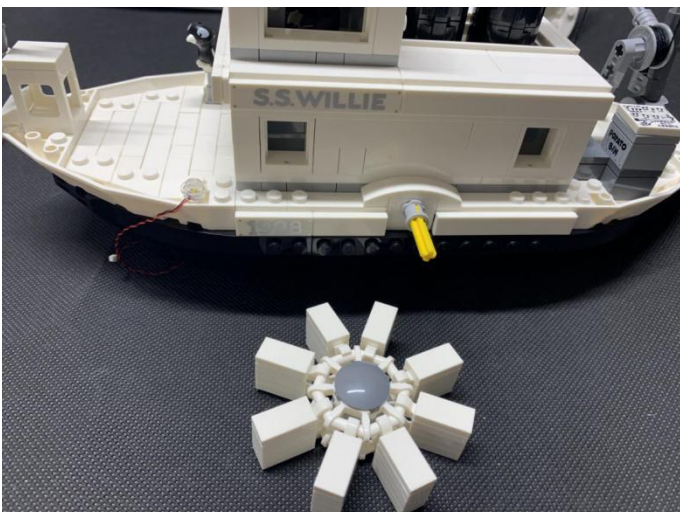
6. Connect the light to the following place.



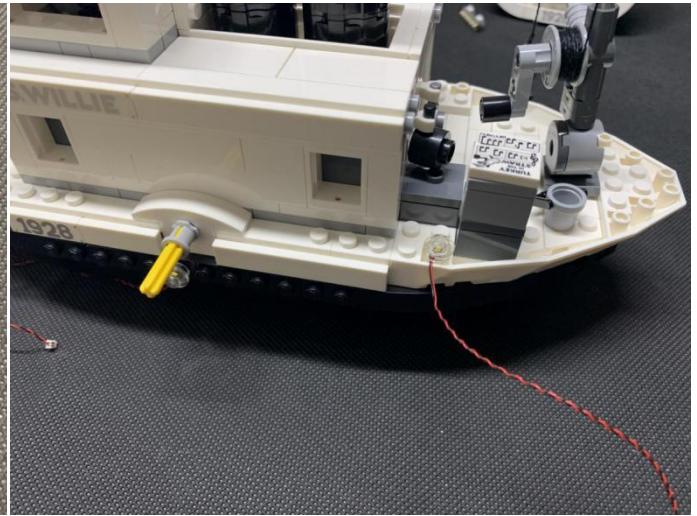
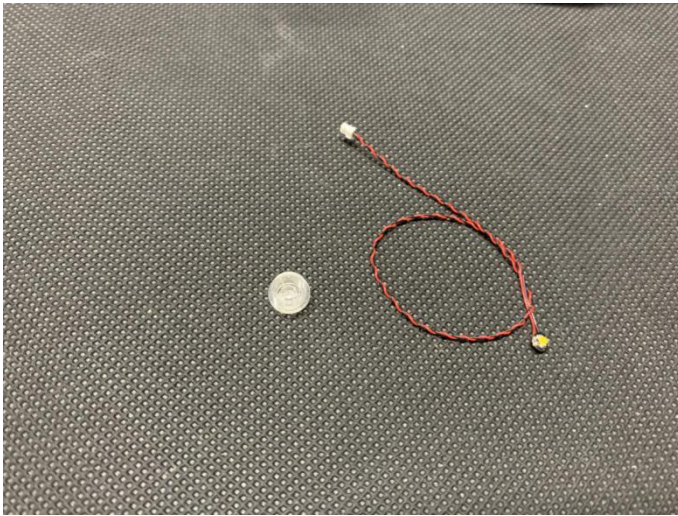
7. Take a warm white 15cm dot light, a trans 1x1 round plate.



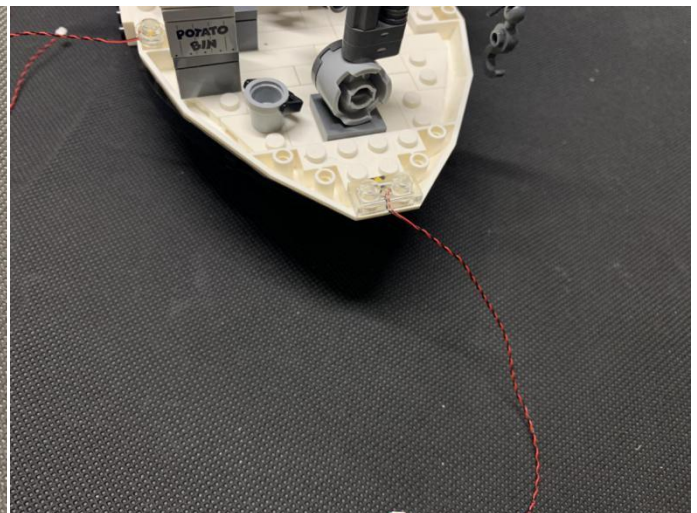
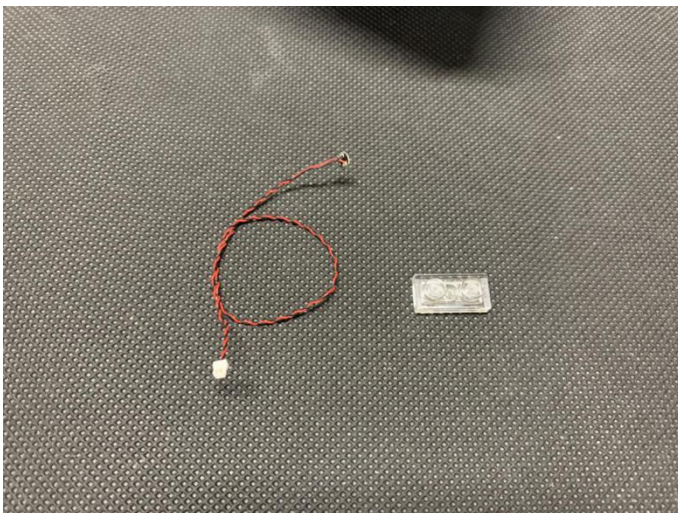
8. Remove the wheel from one side of the boat, connect the light to the following black piece behind the wheel. Note: do not remove the cross joint while you're removing the wheel.



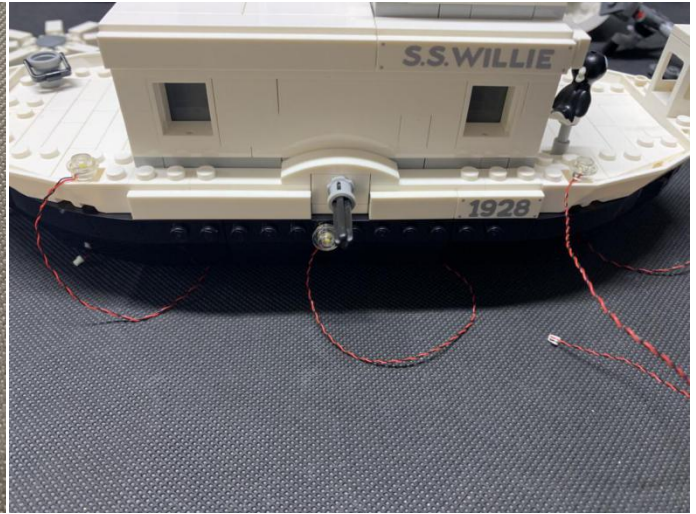
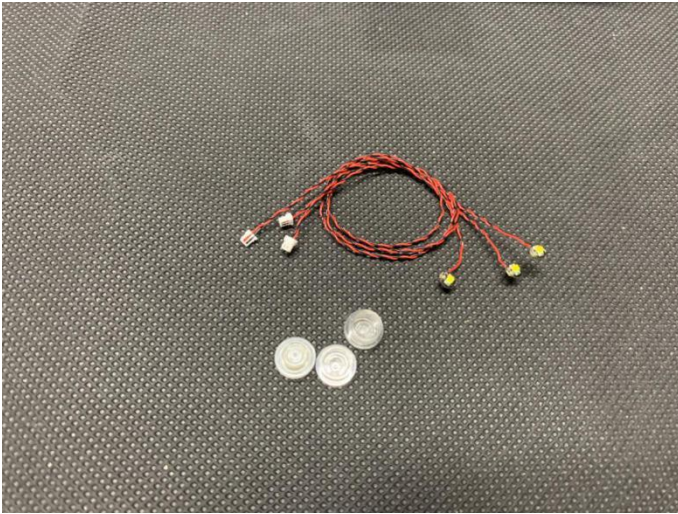
9. Similarly, take another warm white 15cm dot light, a trans 1x1 round plate. Connect them to the tail of the boat at the same side.



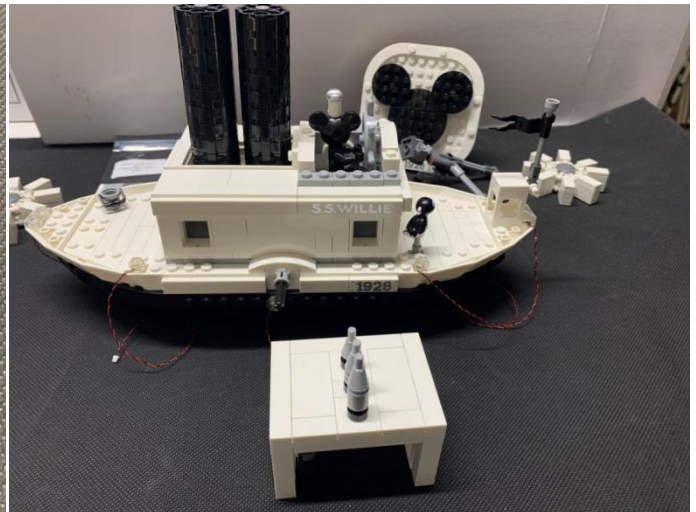
10. Take a warm white 15cm dot light, a trans 1x2 plate, turn the boat to its back, connect the light to the following place.



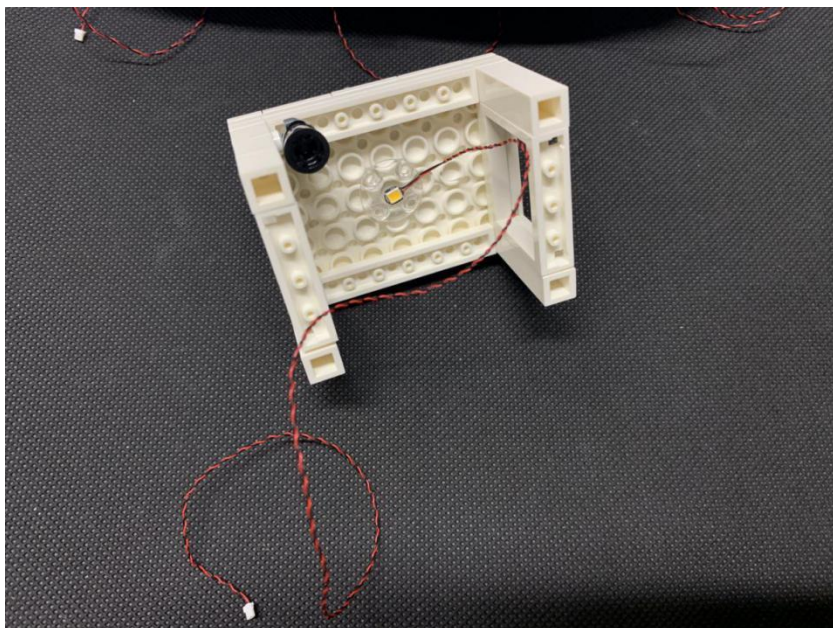
11. Turn to the other side. Take 3 warm white 15cm dot lights, 3 trans 1x1 round plates, repeat the previous steps to install the lights to the following places.



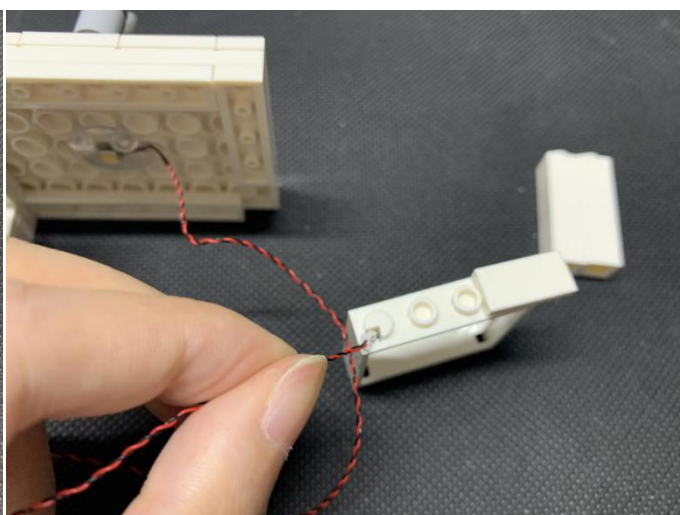
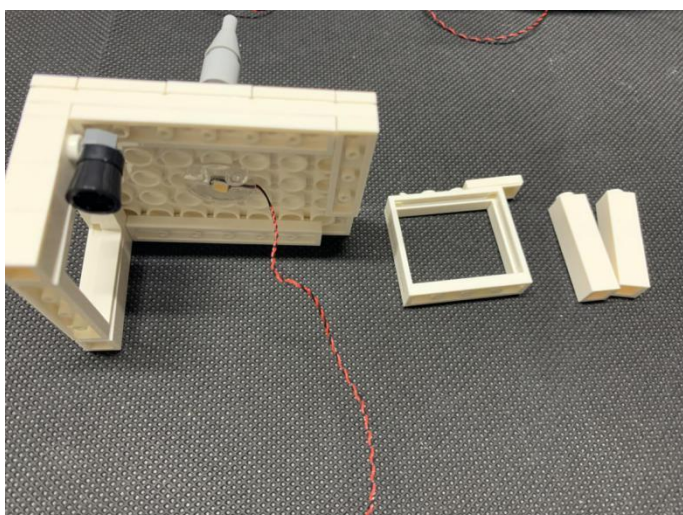
12. Take a warm white 30cm light, a trans 2x2 round plate. Remove the top from the boat.



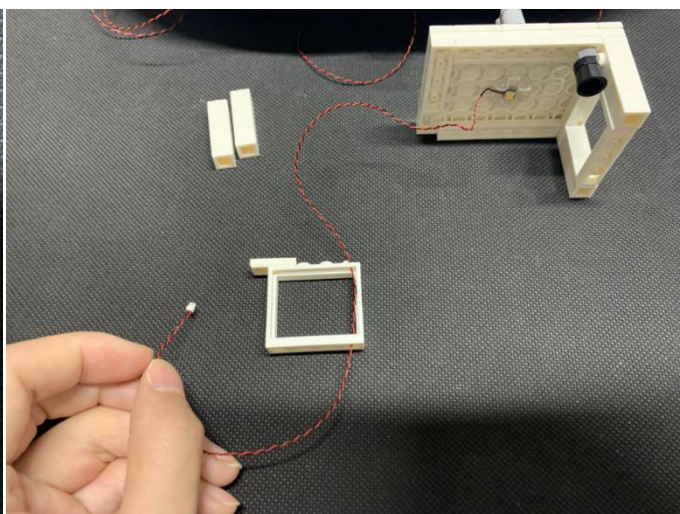
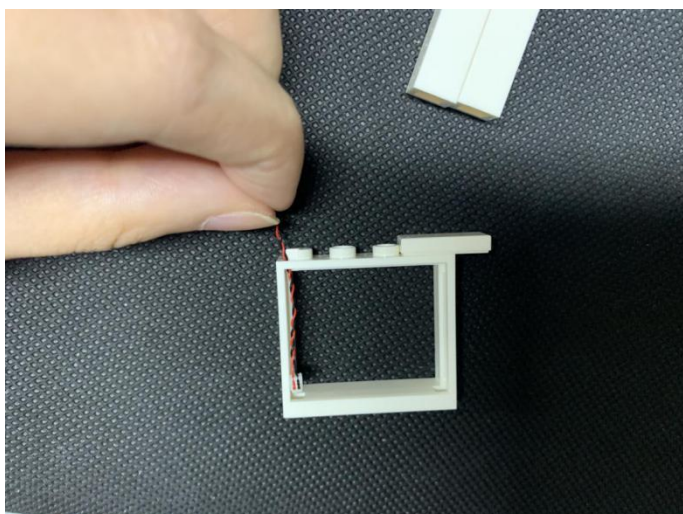
13. Connect the light to the top part we just removed, as per below.



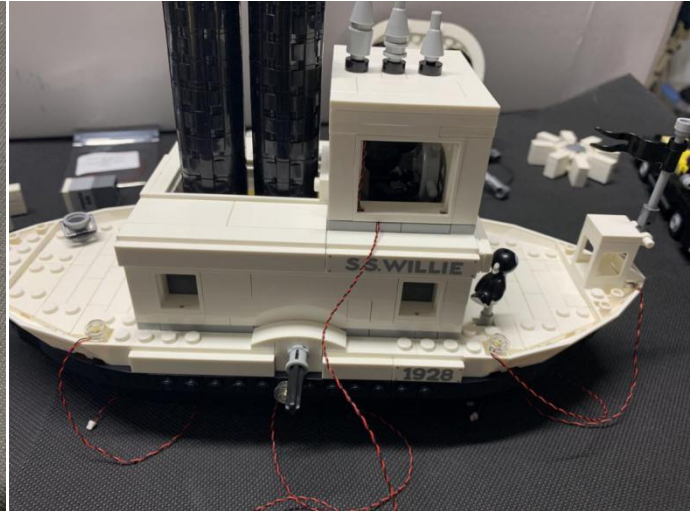
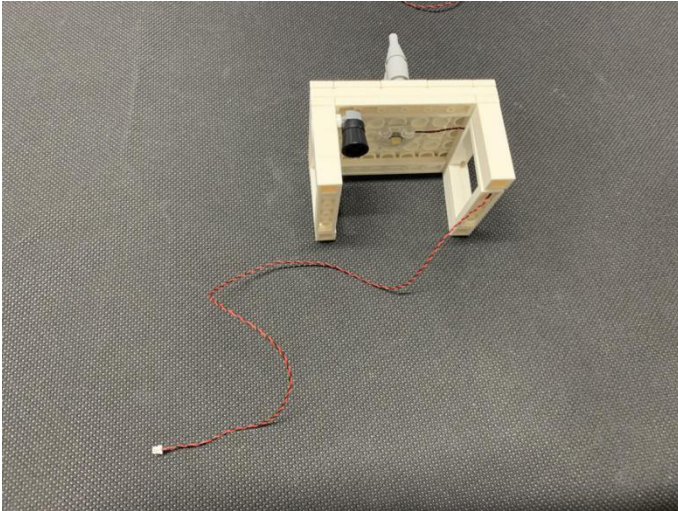
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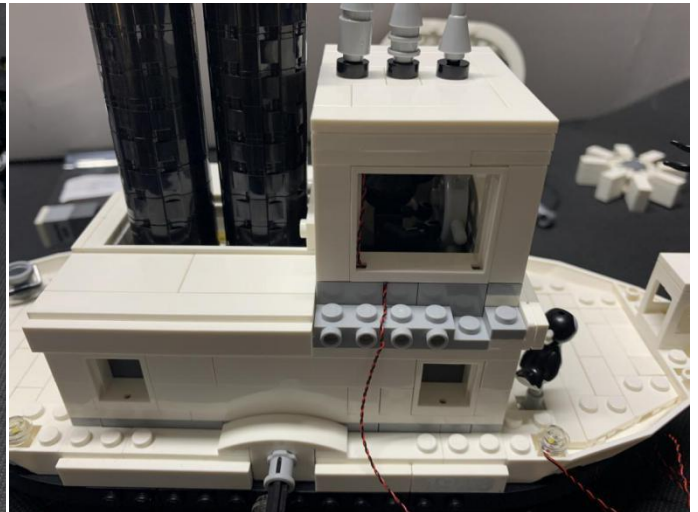
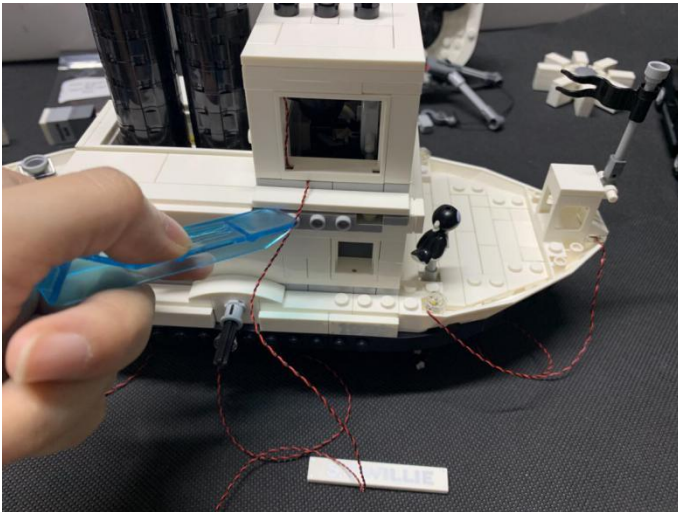
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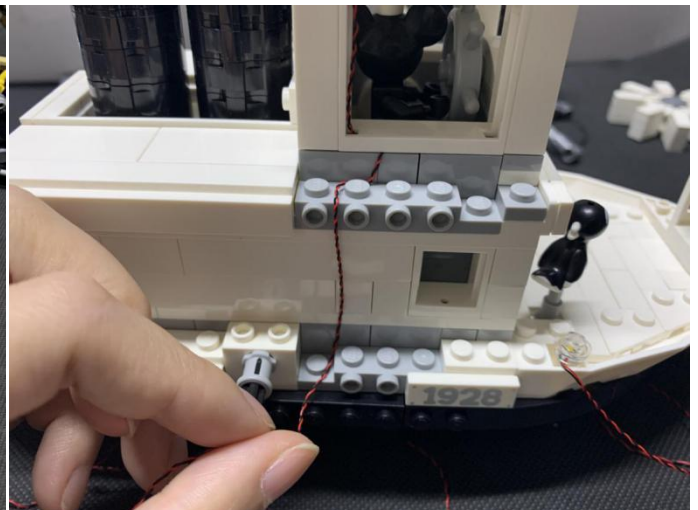
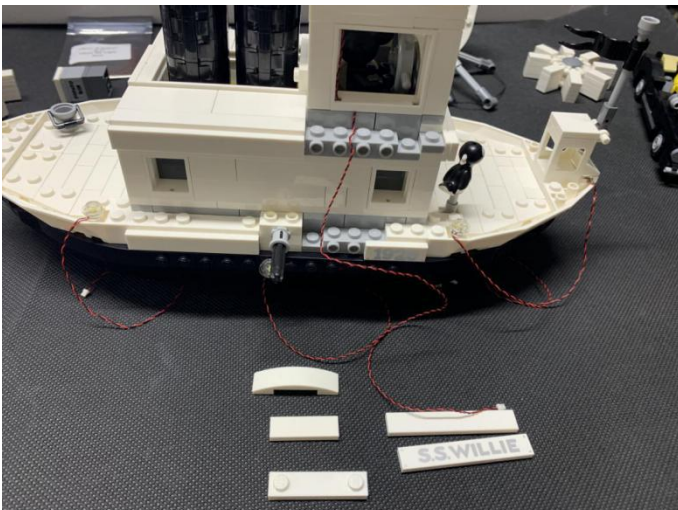
16.Reconnect the top part, place the cable of the light aside.



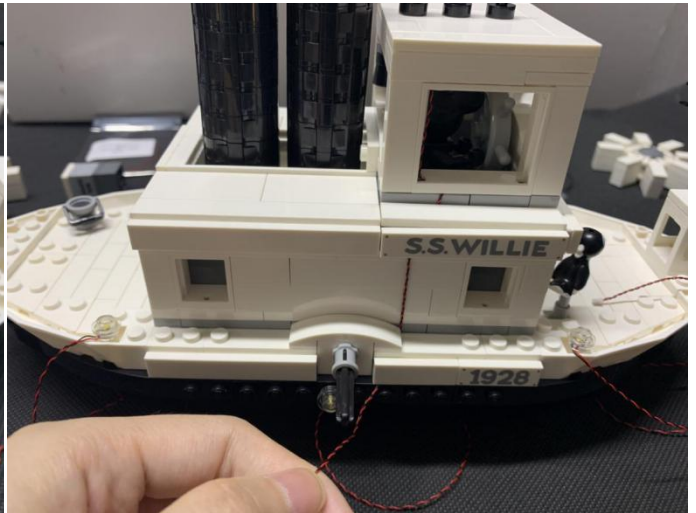
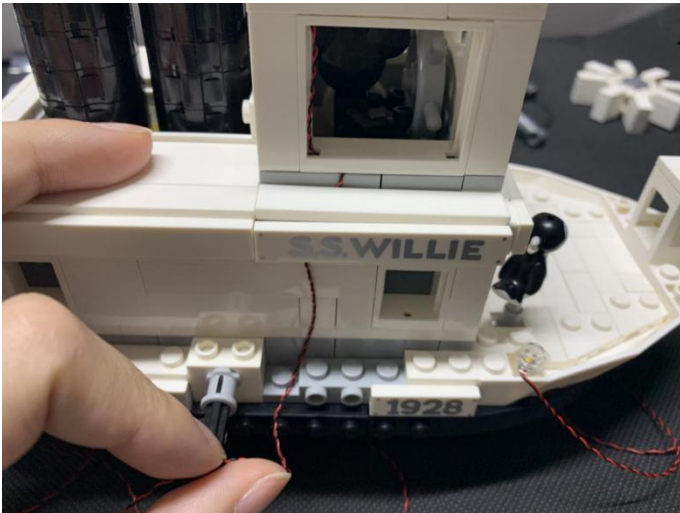
17.Remove the following white plate, pull the cable toward the bottom of the boat, place the cable in between studs.



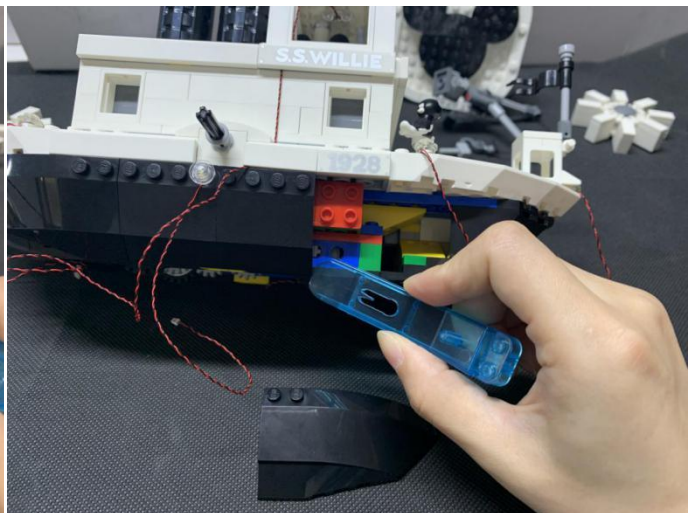
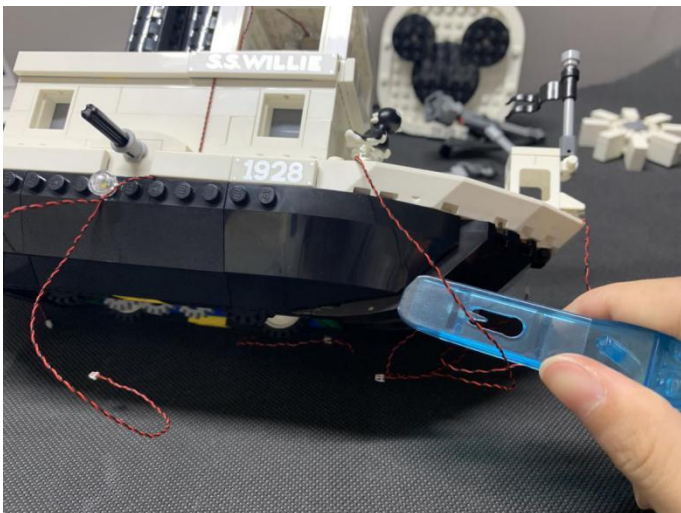
18



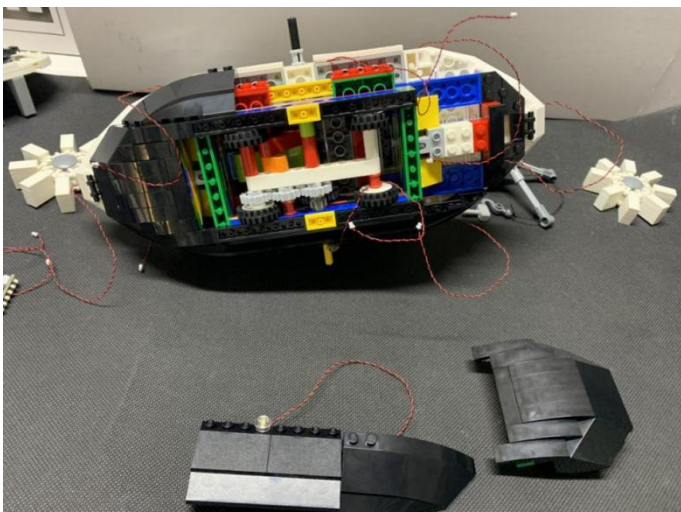
19.reconnect the plates, hiding the cable underneath.



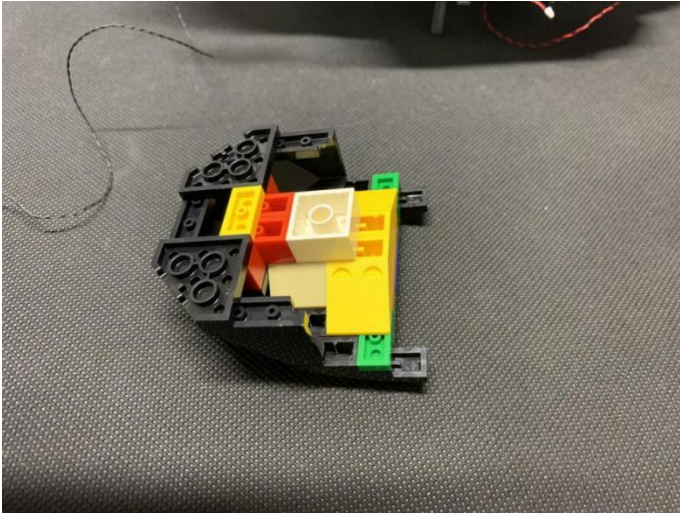
20.Turn the boat over to its side, remove the following black pieces from the bottom of the boat.



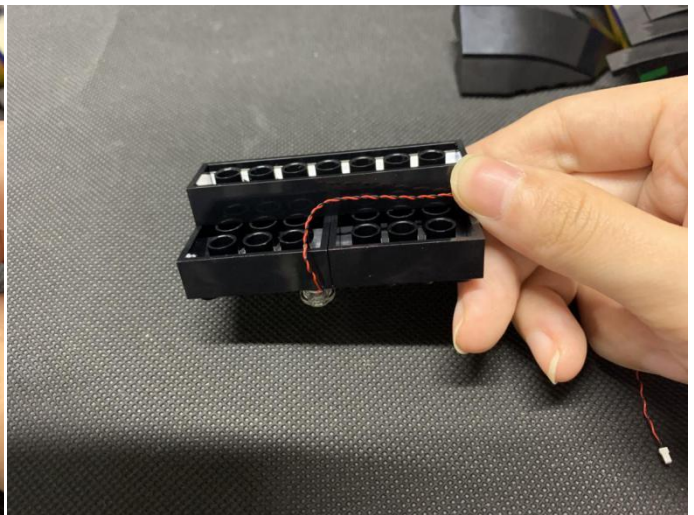
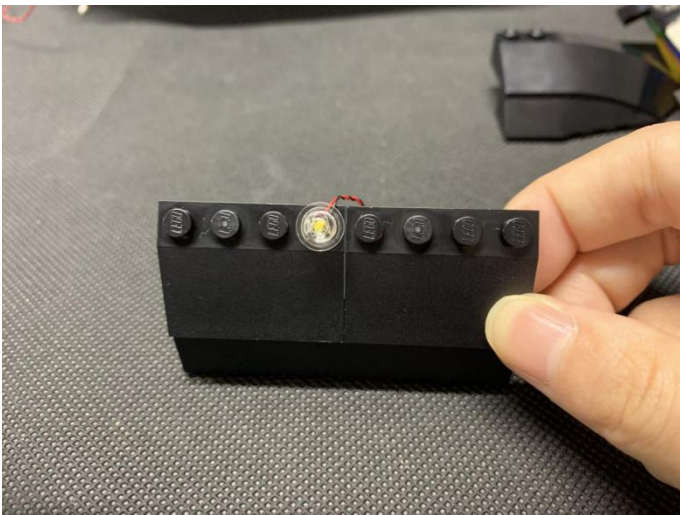
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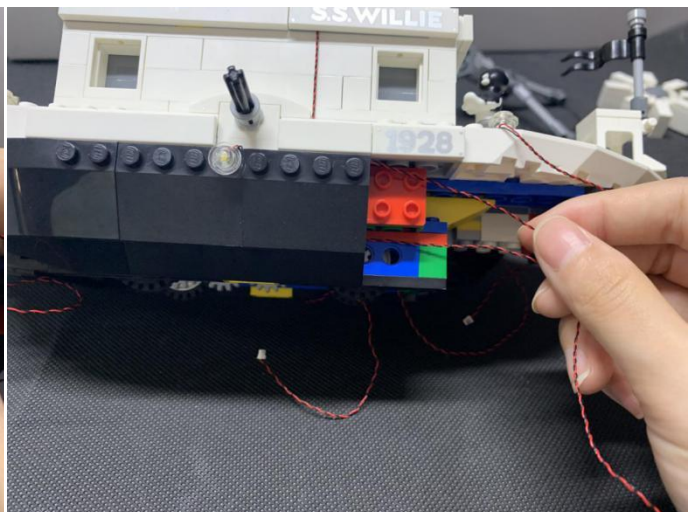
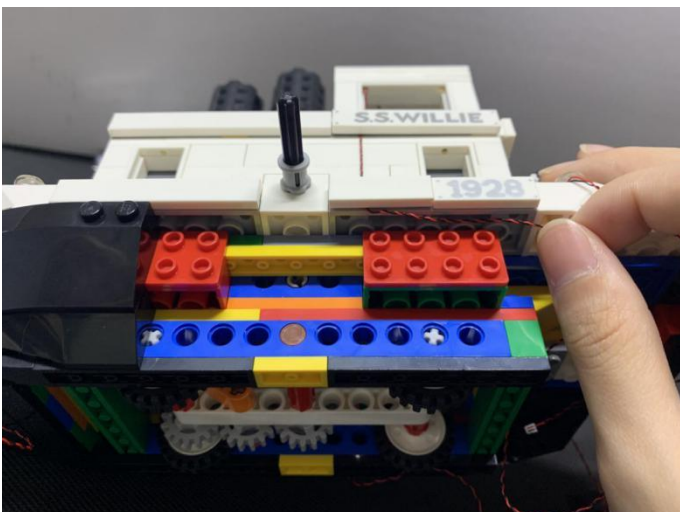
22. Remove the following piece from the head of the boat.



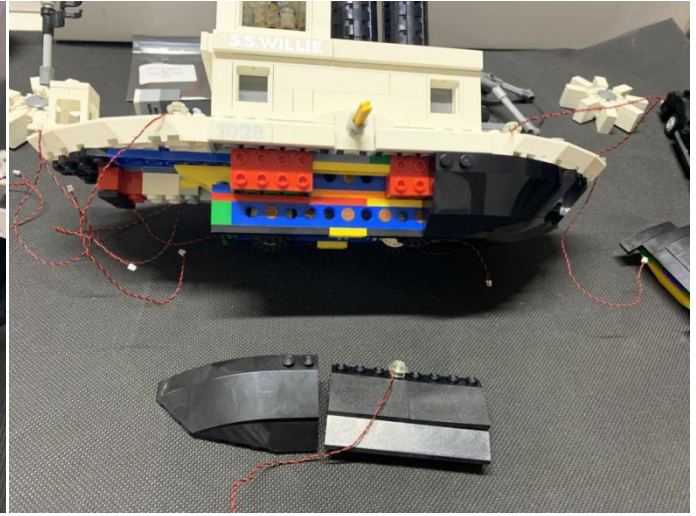
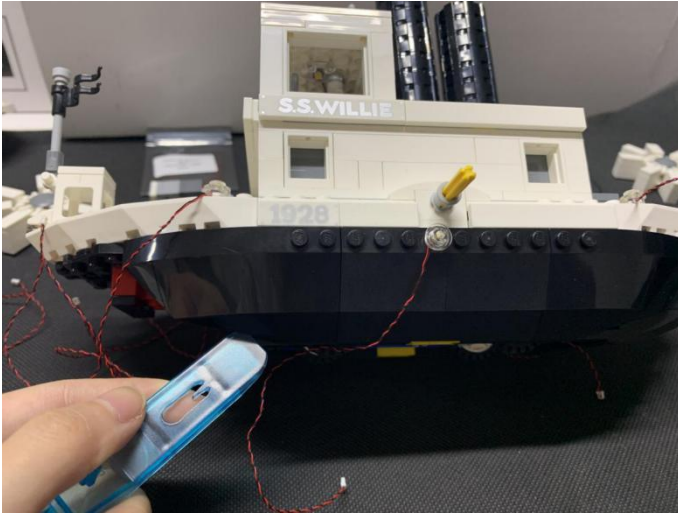
23. Pull the cable of the following light to the back of the plate.



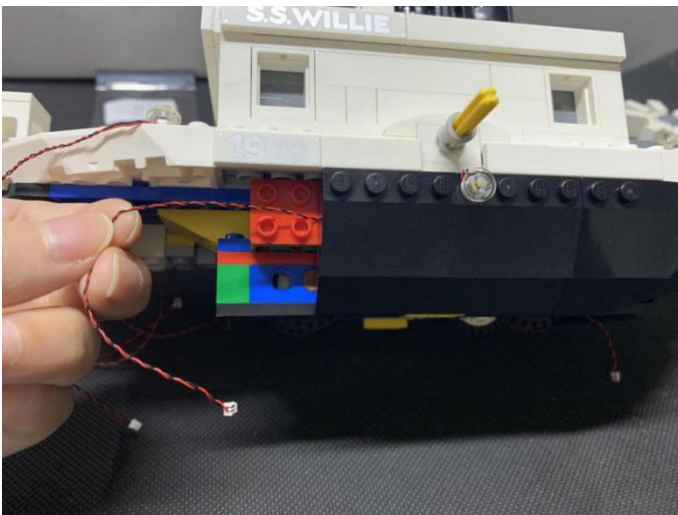
24. Pull the cable of the light toward the head of the boat, reconnect the black piece, place the cable in between studs.



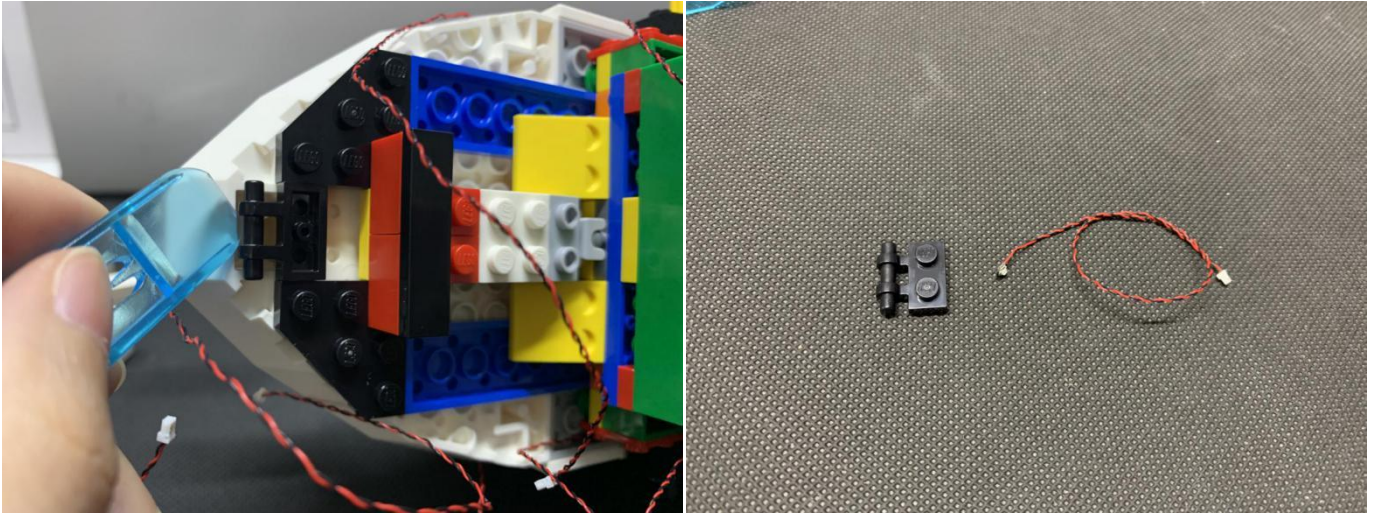
25. Turn to the other side of the steam boat, remove the following black pieces.



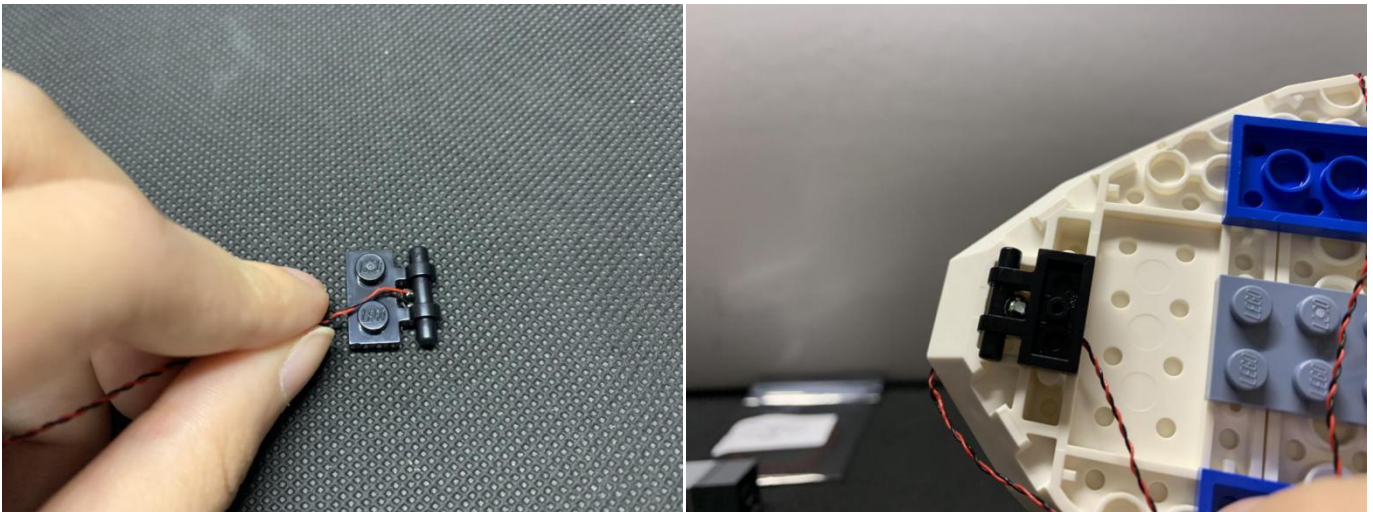
26. Place the cable of the light from the black piece underneath in between studs, reconnect the following pieces.



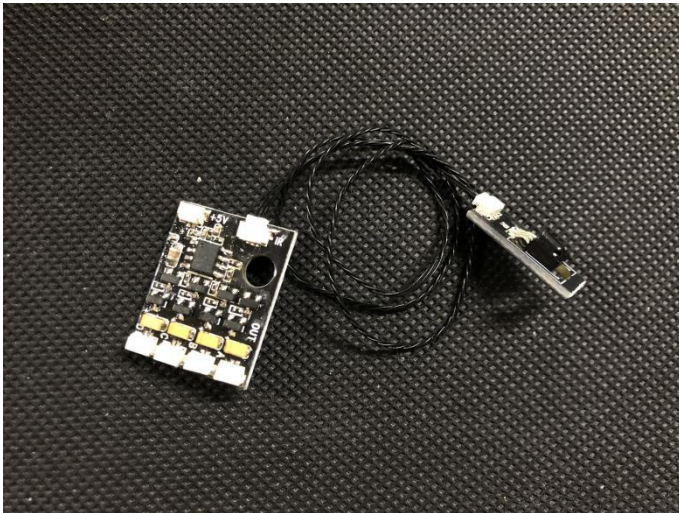
27. Remove the 1x2 black plate from the head of the boat, take a blue 15cm dot light.



28. With lighting part downward, place the dot light at the hole on the black plate. Reconnect the black plate back to the head of the boat, from the bottom of the boat, pull the cable backward.



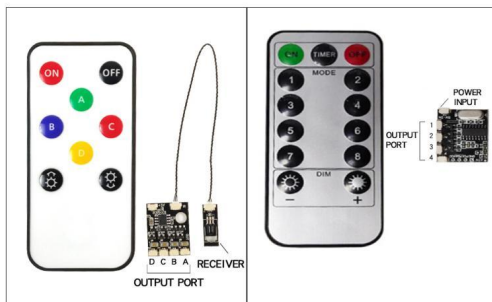
29. Take the Remote Control Switch Board, the USB Power Cable.



FRIENDLY TIPS

The remote control has been updated

Old style remote control:



New remote control:

NEW REMOTE CONTROL FUNCTION INTRODUCTION	
ON:	All branches are fully open
OFF:	All branches are closed
A:	Open/close A branch
B:	Open/close B branch
C:	Open/close C branch
D:	Open/close D branch
FS:	Turn on blinking for the last open channel
BLN:	Start breathing for the last opened path
↑	Increase blinking/breathing rate
↓	Reduce flicker/breathing rate
☀+	Increase brightness
☀-	Reduce brightness

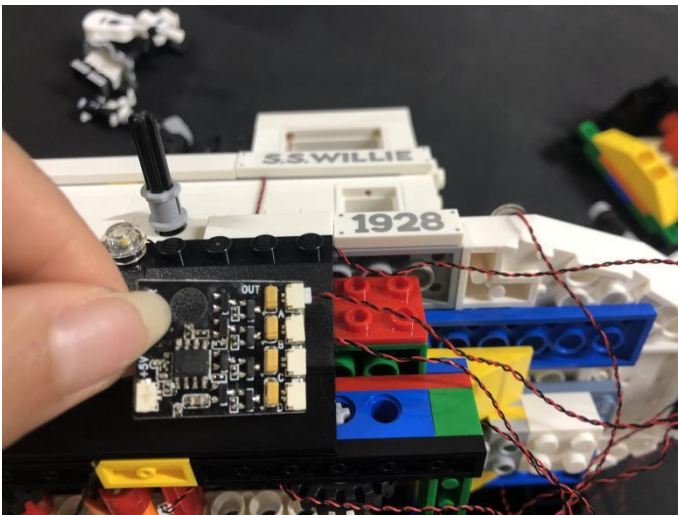
- ① Cancel the external signal receiver and change to an integrated design with strong signal and fast feedback.
- ② Add more functions, such as adding buttons such as breathing flashing frequency
- ③ The old A.B.C.D or 1.2.3.4 route corresponds to the new A.B.C.D route

More fun features look forward to your exploration!

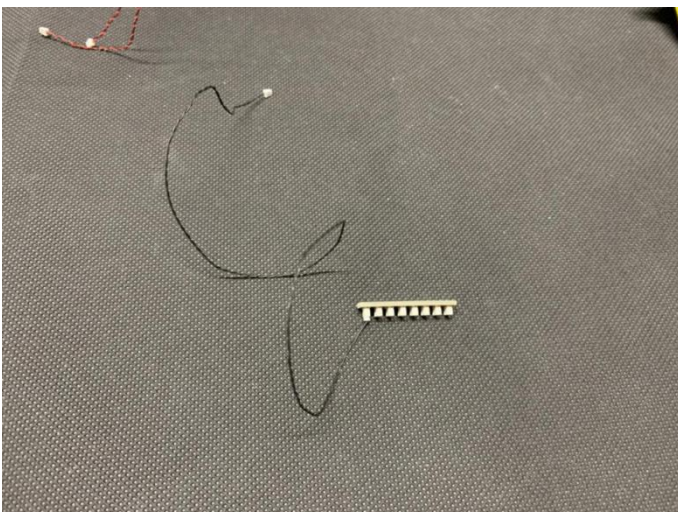
The remote control does not contain batteries, please buy a CR2025 or CR2032 button battery in the nearest store and install it in the remote control.



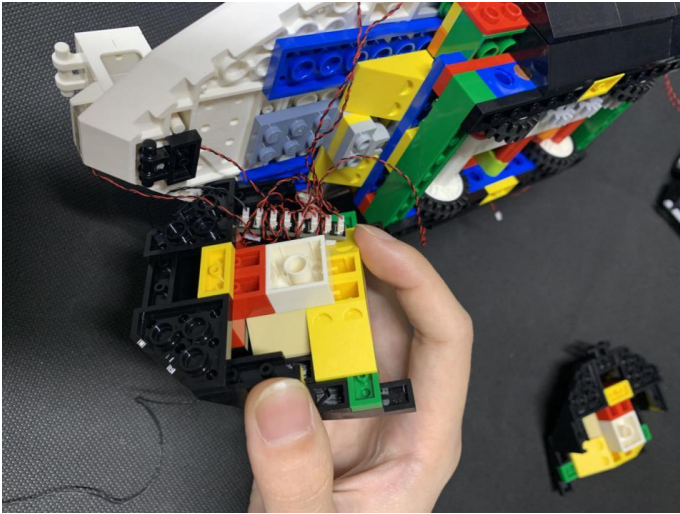
30. Connect the 30cm connecting cable of the warm white light to the remote control switch board.



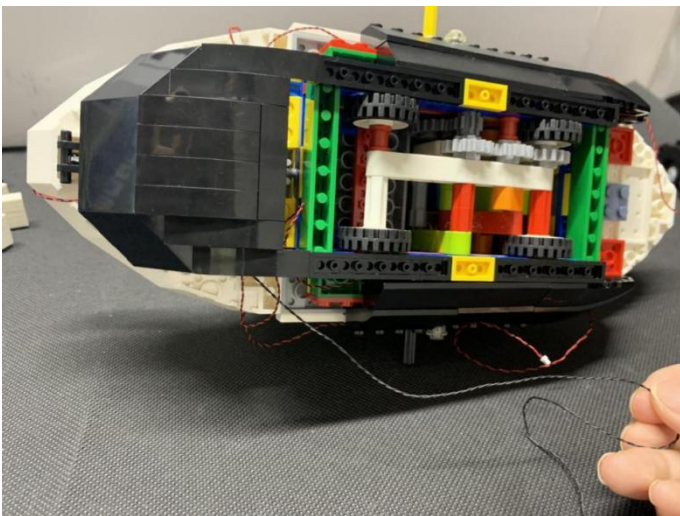
31. Take the 8-port Expansion Board, connect a 30cm connecting cable to it.



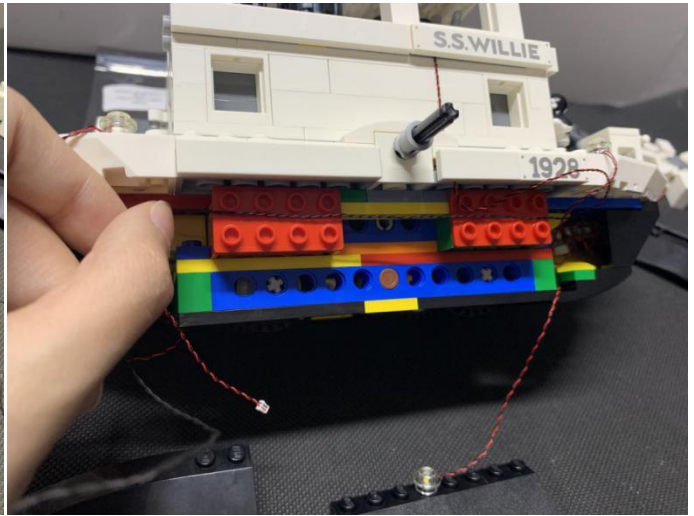
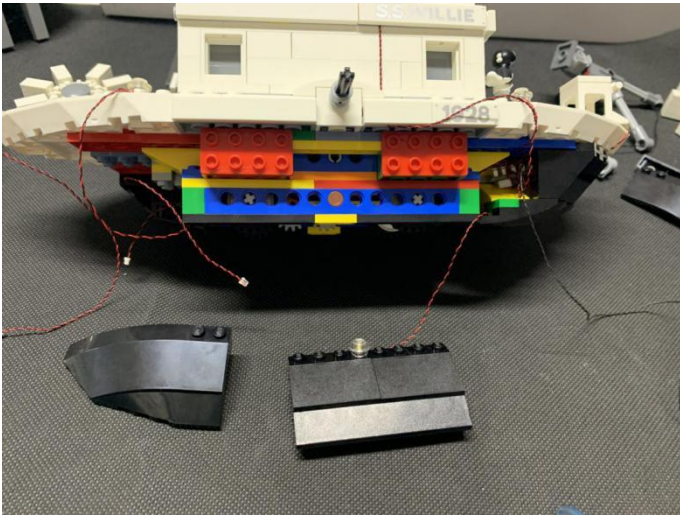
32. Connect all the 6 cables of the lights from the head of the boat to the 8-port Expansion Board. Place the 8-port Expansion Board to the following place at the head of the boat.



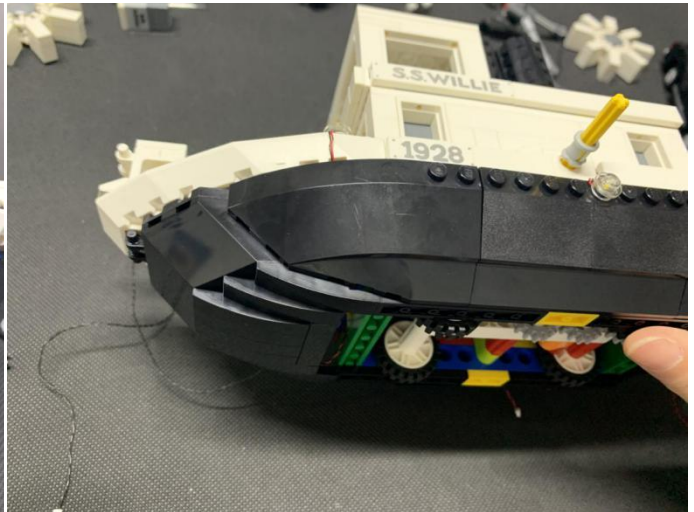
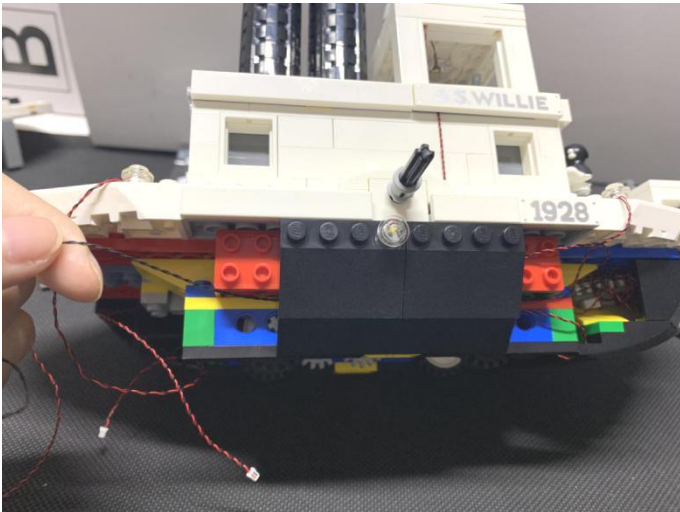
33. Reconnect the pieces, pull the 30cm connecting cable out from the bottom. Note: place the cable in between studs.



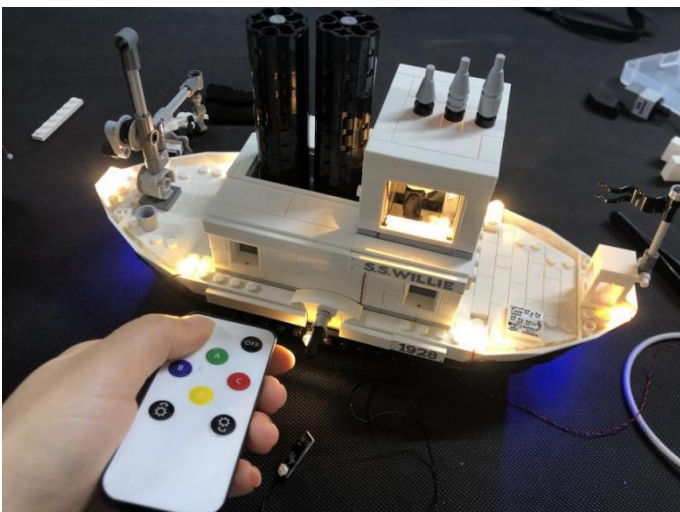
34. Remove the following black plate from the bottom of the boat, pull the cable alongside to the tail.



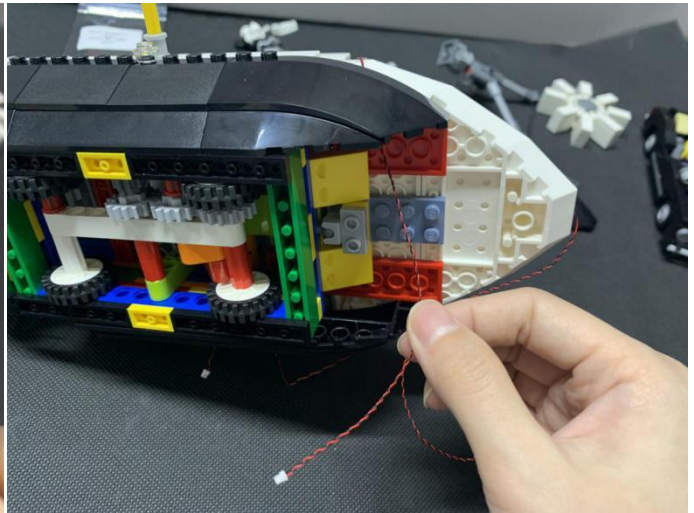
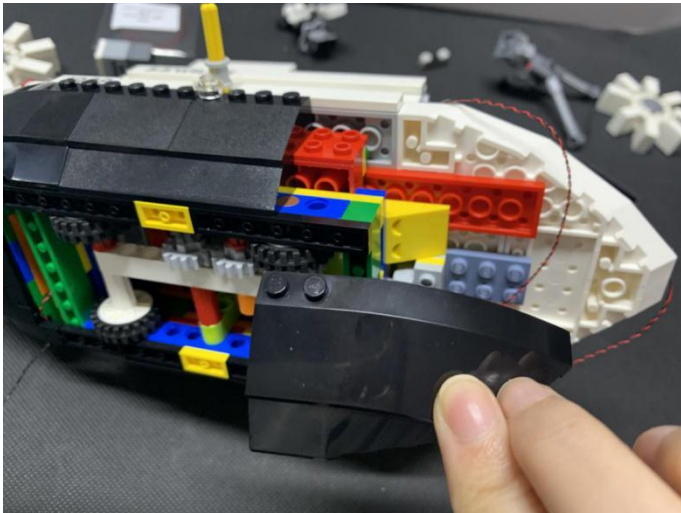
35. Reconnect the black plates, hide the cable underneath.



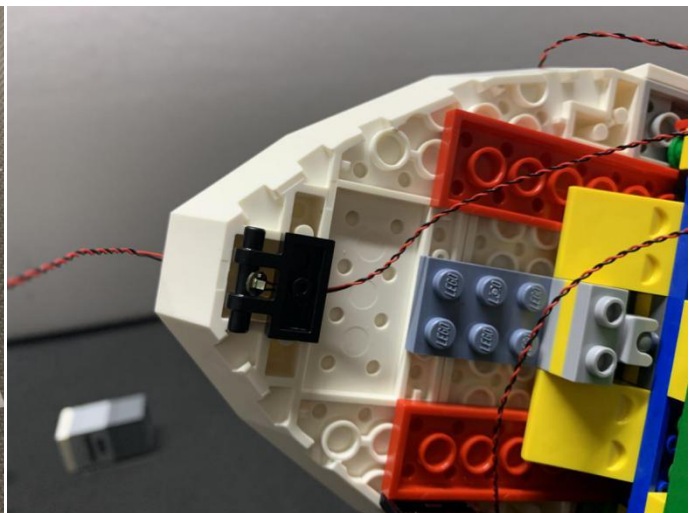
36. Turn the power on to verify the current.



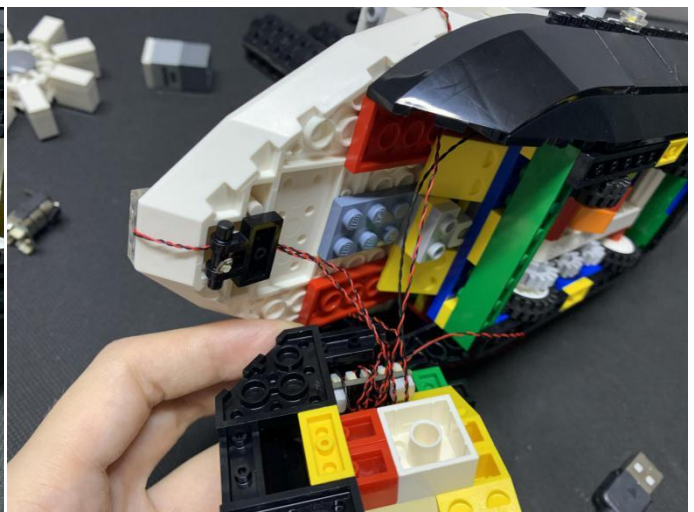
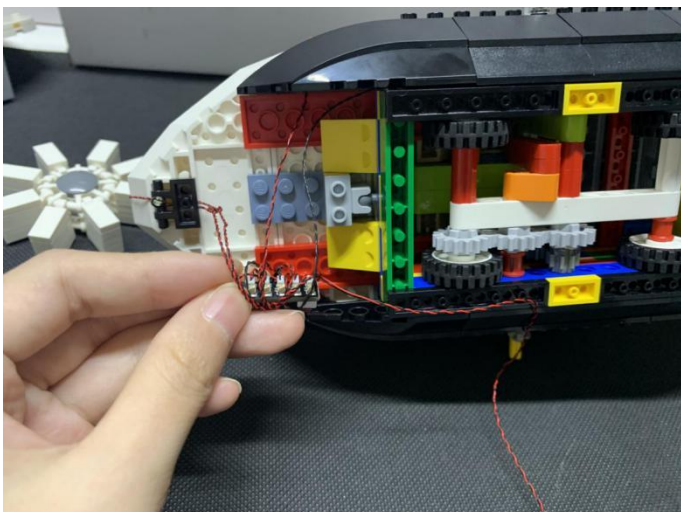
37. Remove the black plate from the tail.



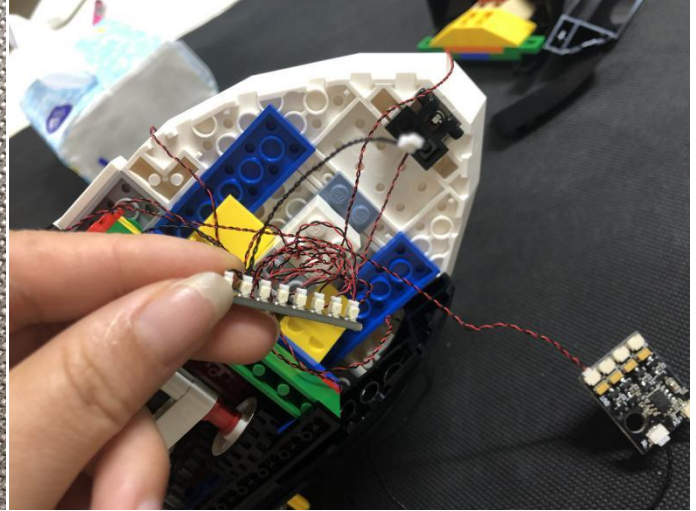
38. Take a 15cm blue dot light, repeat the previous steps to install it to the tail.



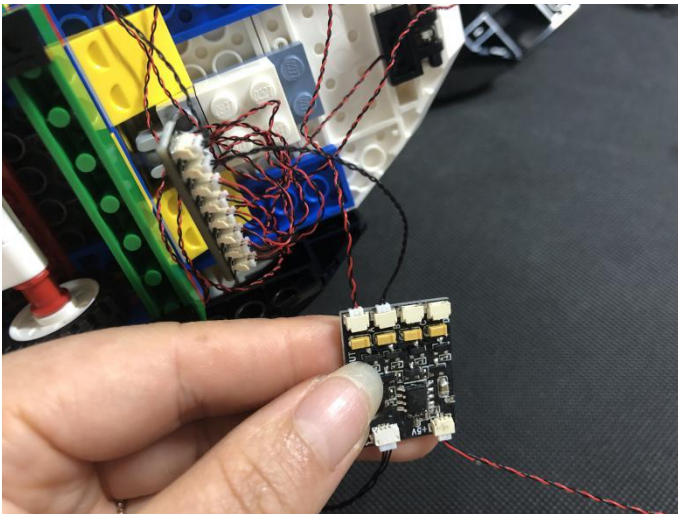
39. Take a 6-port expansion board, connect the cables from the tail to it, place it to the following position.



40. Take a 5cm connecting cable, connect to the 6-port expansion board at the head of the boat, connect the other end of the cable to the remote control switch board. Place the board to the following position.



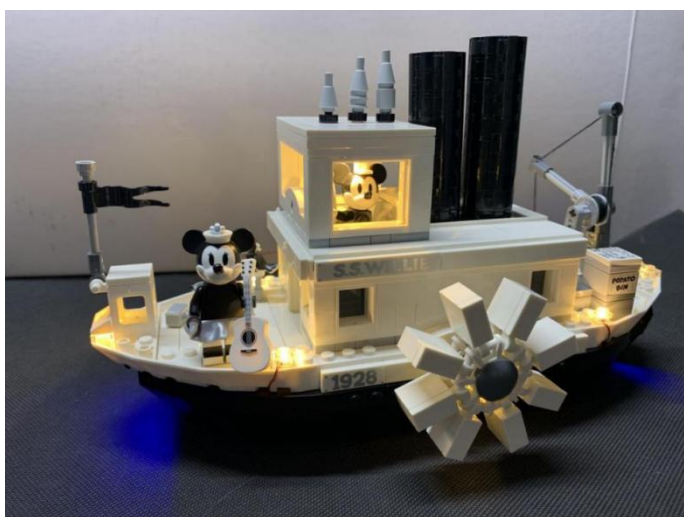
41



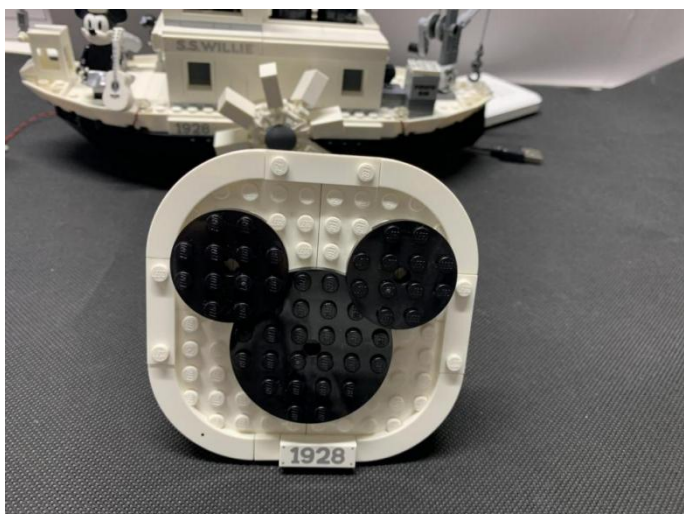
42.Leave some space when reconnect the runner.



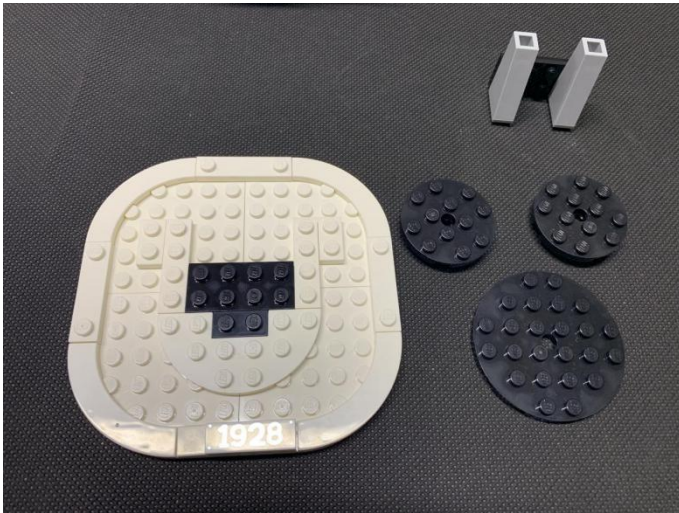
43.This completes installation for the steamer. Turn the power on and enjoy!



44.Continue to install lights for the display board.



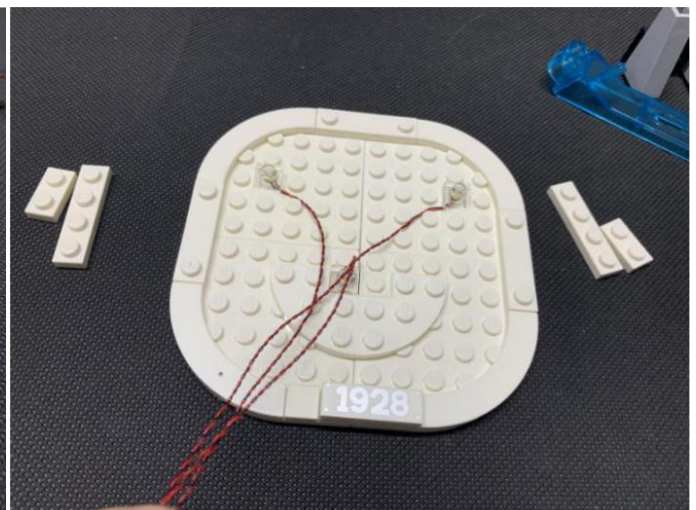
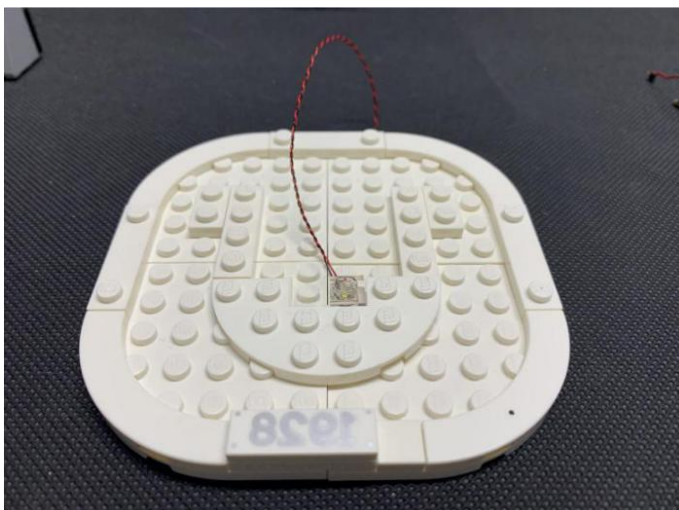
45.Disassemble the board as per below.



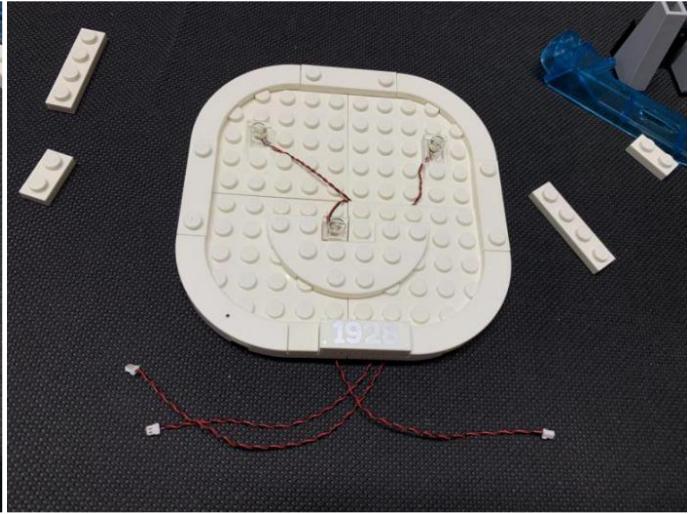
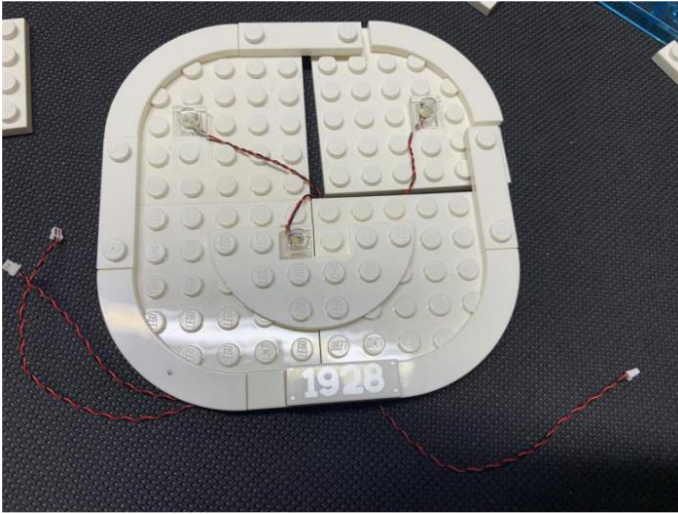
46.Take 3 warm white 15cm dot lights, 3 trans 1x1 plates.



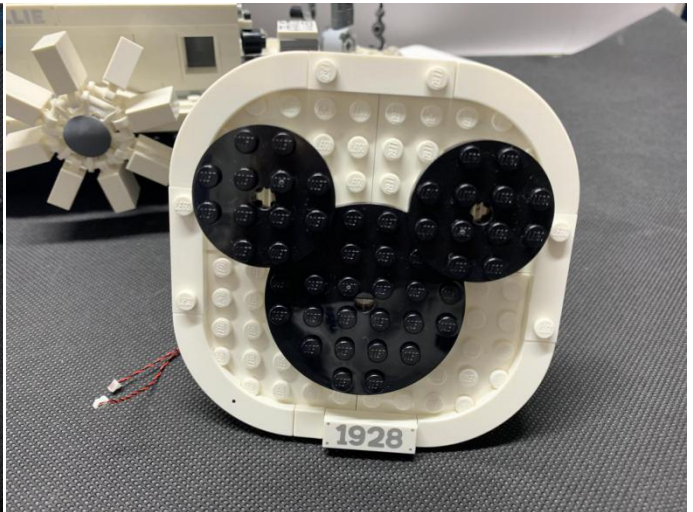
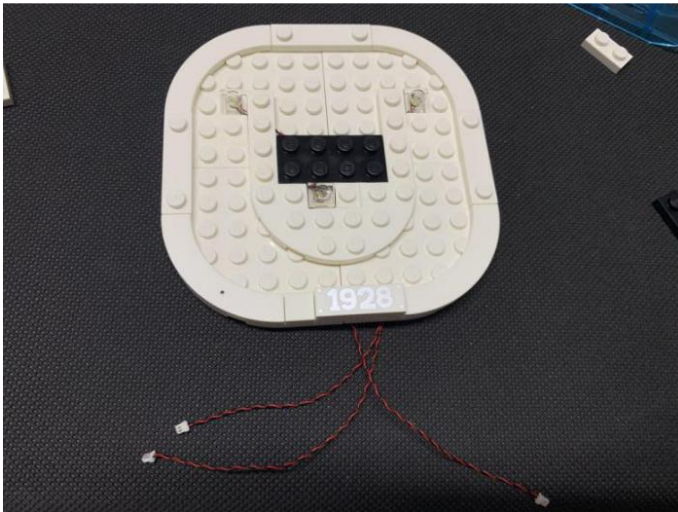
47.Connect the lights to the following places, replace the original black plates and white plates with the trans ones.



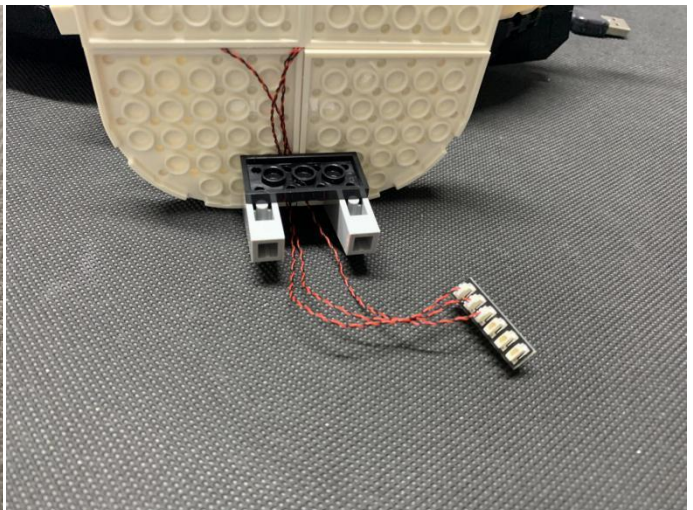
48. Thread the cables through the center to the back of the board.
Reconnect the display board.



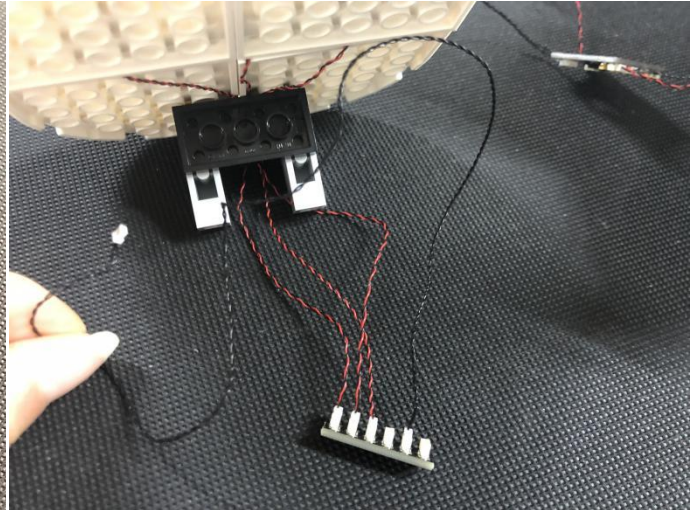
49



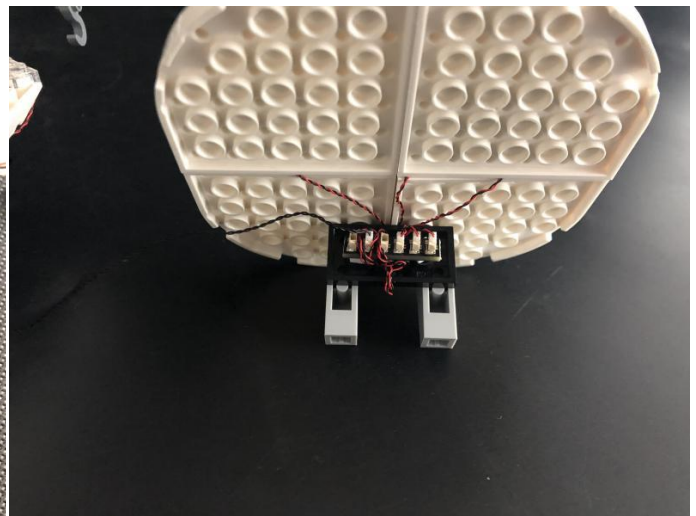
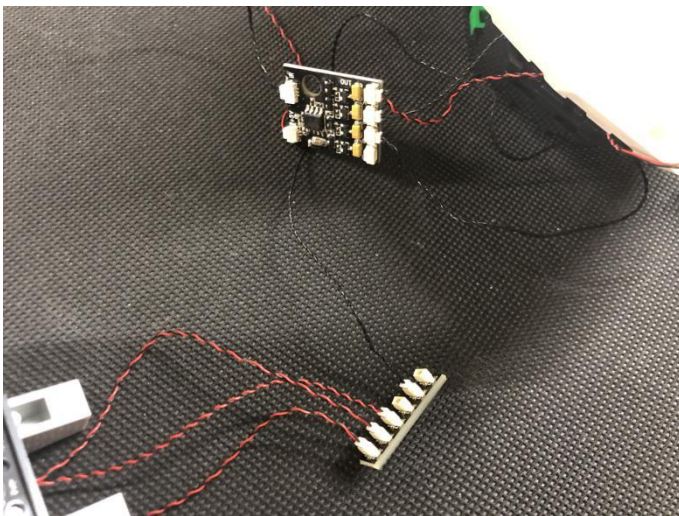
50. Take a 6-port expansion board, connect the cables of the lights to it.



51. Take a 30cm connecting cable, connect it to the 6-port expansion board. Connect the other end of the cable to the remote control switch board. Stick the expansion board to the back of the board



52



Good job, you've done all the installation steps, power it up and enjoy your work.

