

# 75957 The Knight Bus P13704

- **P13704 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 “75957 P13704”.**
- **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.

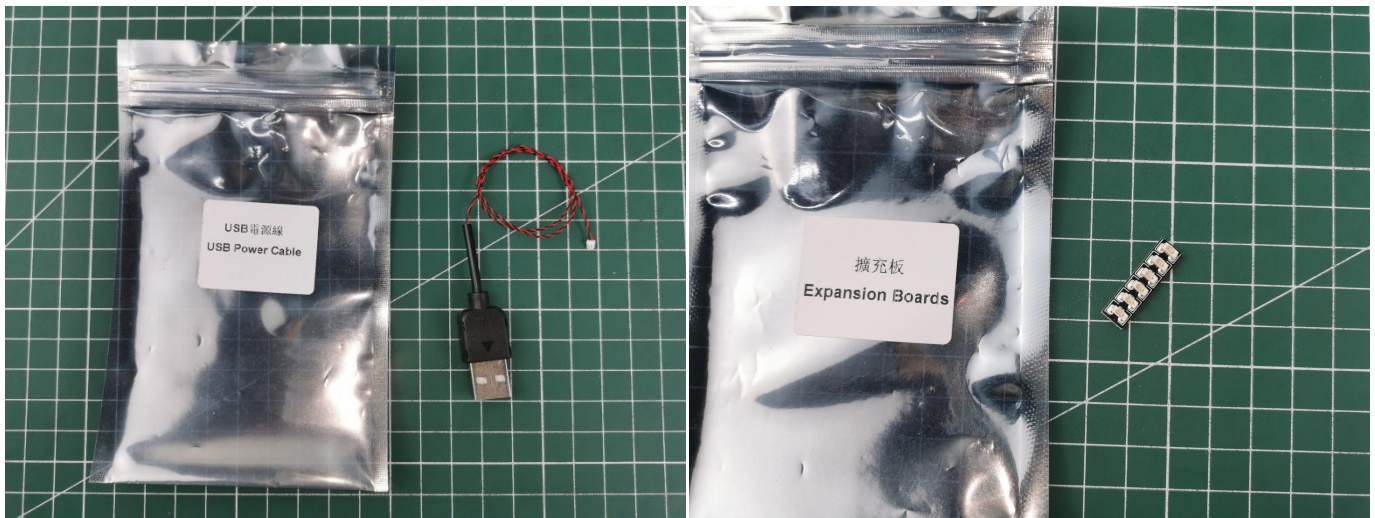
There are 15 bags in this set. The name and quantities of specific components are as shown , please check carefully.

Label	Content	Quantity
Bit Lights-15CM-White	Bit Lights-15CM-White	2
Multi-Colour Lights 30CM	Multi-Colour Lights 30CM	2
LED Strip Lights-Blue	LED Strip Lights-Blue	1
LED Strip Lights-Warm White	LED Strip Lights-Warm White	1
Expansion Board	6 Socket Expansion Board	2
	4 Socket Expansion Board	1
USB Power Cable	USB Power Cable-30CM	1
Connecting Cables-5CM	Connecting Cables-5CM	2
Connecting Cables-15CM	Connecting Cables-15CM	1
Connecting Cables-30CM	Connecting Cables-30CM	1
Connecting Cables-10CM	Connecting Cables-10CM	1
Flashing Bit Lights-15CM-Red	Flashing Bit Lights-15CM-Red	2
Flashing Bit Lights-15CM-Green	Flashing Bit Lights-15CM-Green	1
Light Strips-Green-7	Light Strips-Green-7	4
Remote Control Board	Remote Control Board	1
Parts package		

Please contact us immediately if there have any missing components.

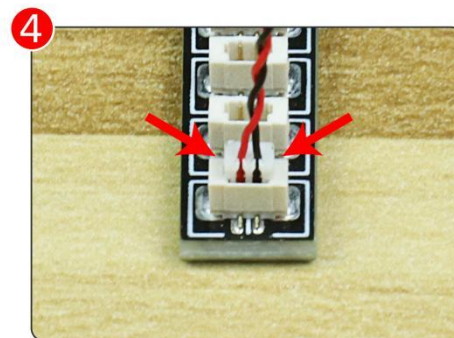
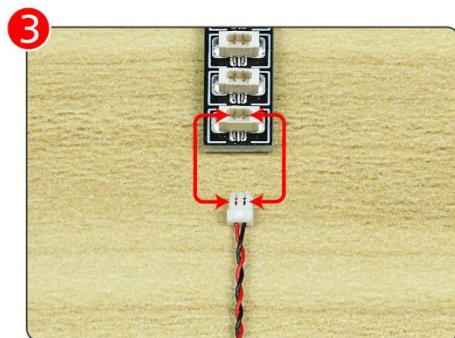
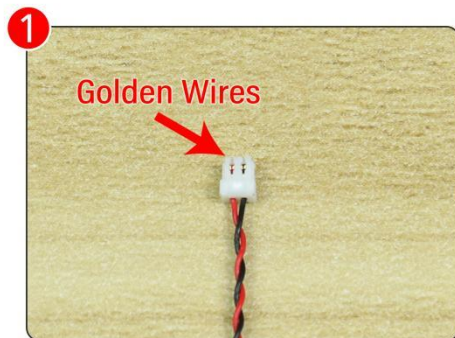
## Section B: Test that each components is working properly.

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



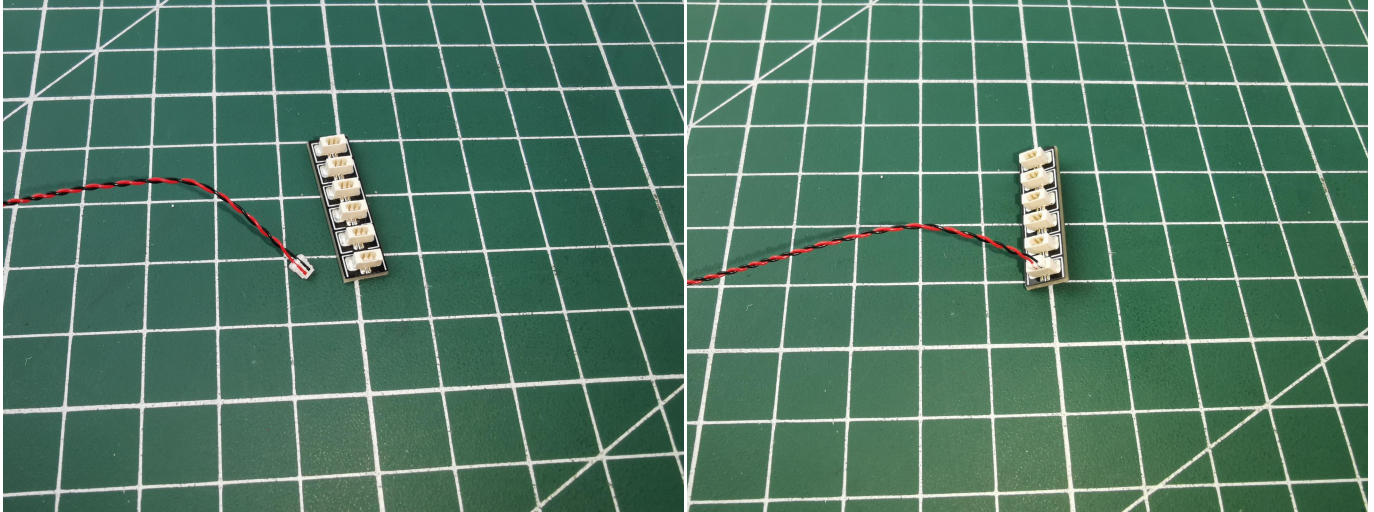
It is worth reminding that our products are all customized. They have a unique way of connecting. The white plug on wire and the socket of the expansion board need to be connected together to transmit power.

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.



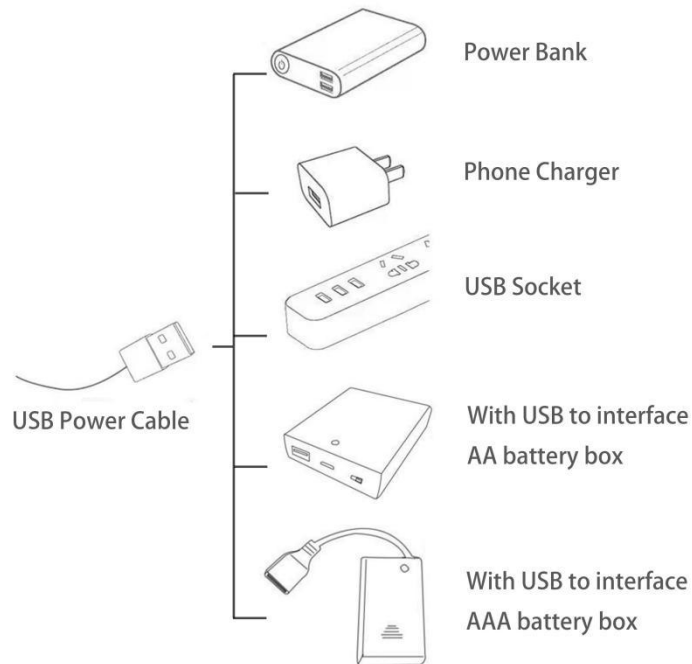
All our connections between plug and socket are all the same as shown above. So for any such structure with plug and socket, please pay attention to the golden wire of the plug and the golden needle of the socket, they must be touched together.

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.

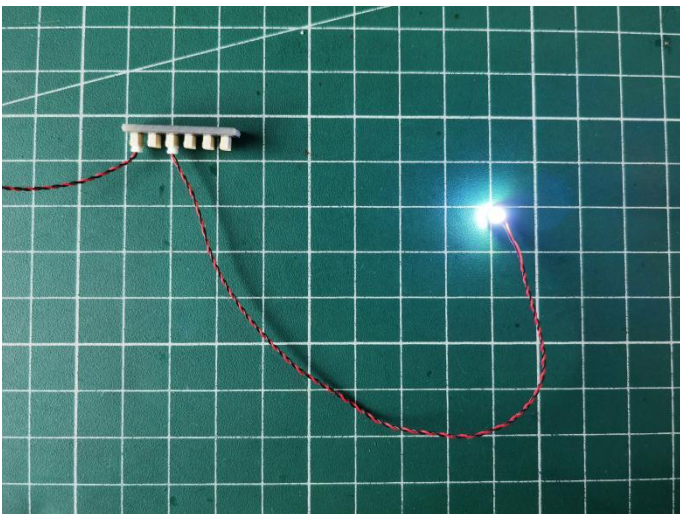
### USB connectors to connect devices



**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-White" particles,Take out the bag labelled "Bit Lights-15CM-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 1\*Bit Lights-15CM-White,2\*Multi-Colour Lights 30CM,1\*LED Strip Lights-Blue,1\*LED Strip Lights-Warm White,2\*Flashing Bit Lights-15CM-Red,1\*Flashing Bit Lights-15CM-Green,4\*Light Strips-Green-7.**

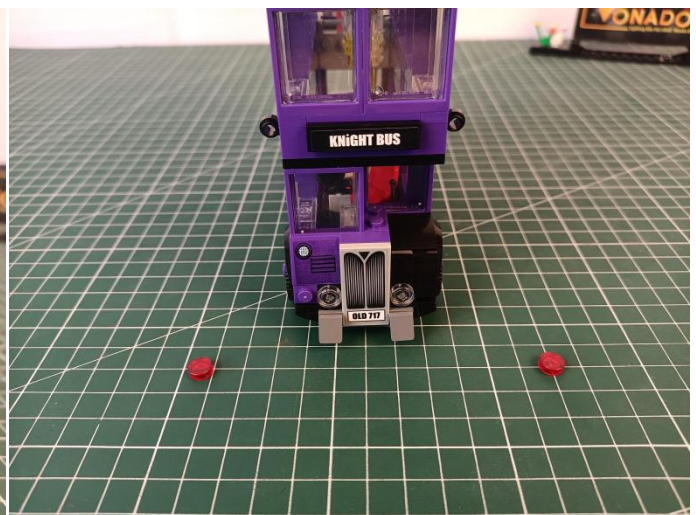
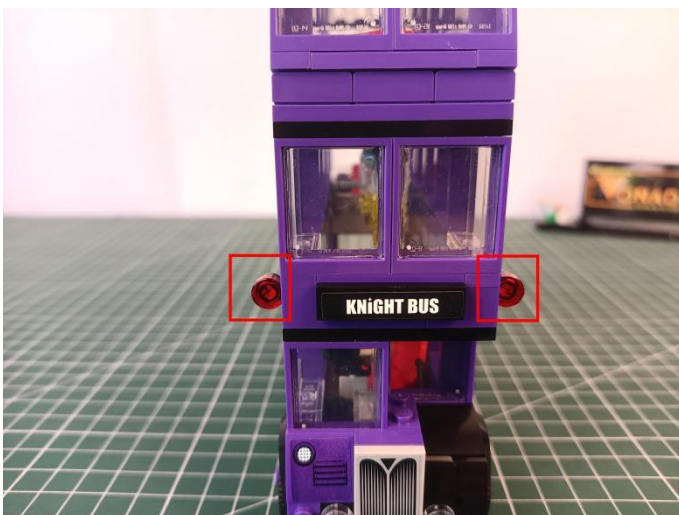
**Please contact us immediately if any components don't work.**

**Section C:** laying out components following the instruction.

**1**



**2.** Remove the red round plates from both sides of the head.

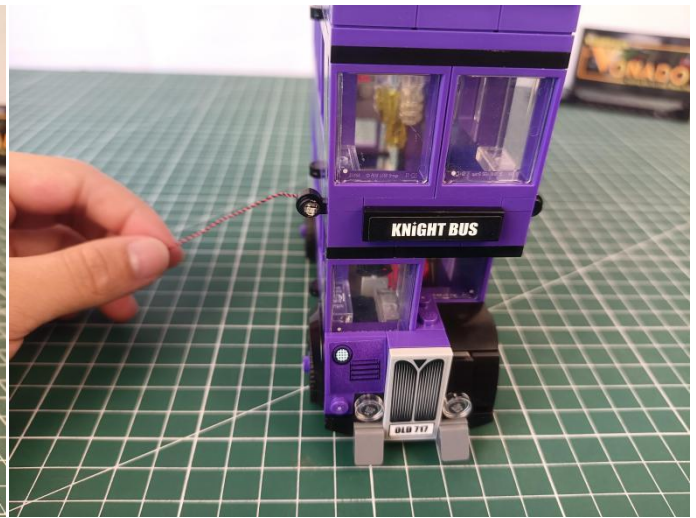
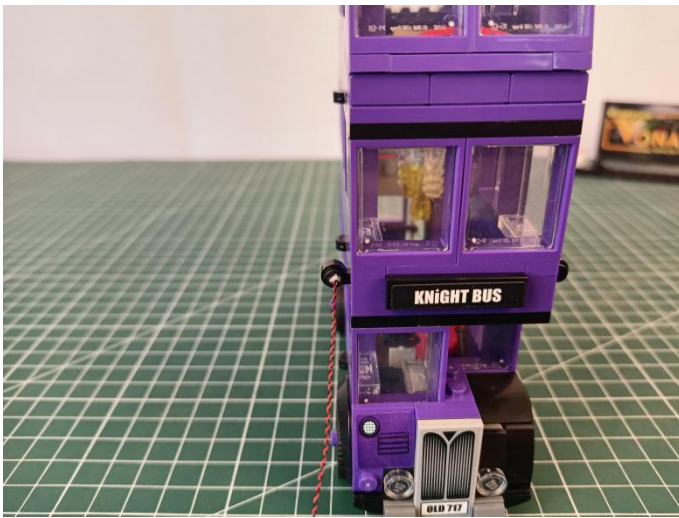


**3.** Take 2 Multi Colour 30cm Flashing Lights, 2 trans white 1x1 round plates.

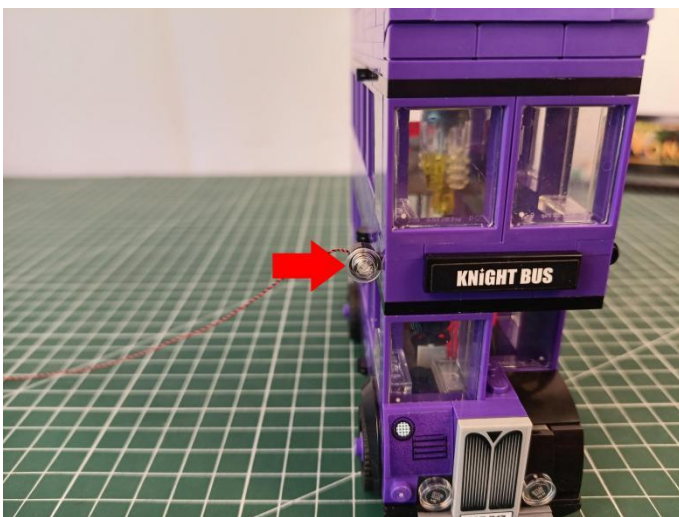




**4.**With lighting part facing up, thread the cable through the following hole and tighten it up.



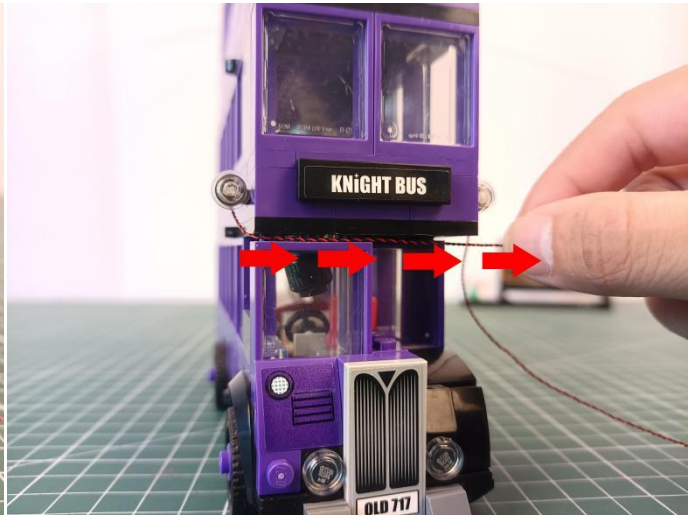
**5.**Connect the trans white round plate over.



**6.**Install the light at the other side in the same way.



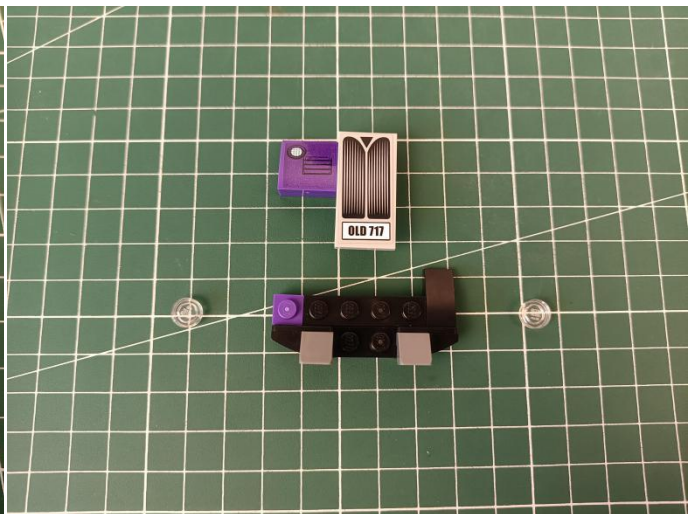
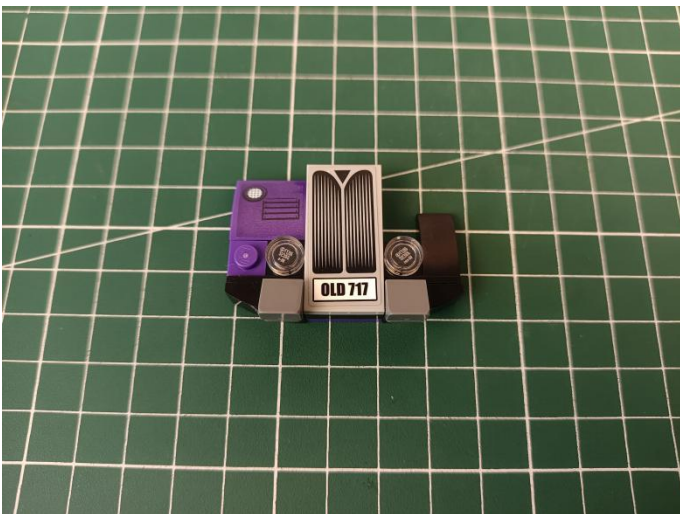
**7.** Turn to the left, place the cable as per below.



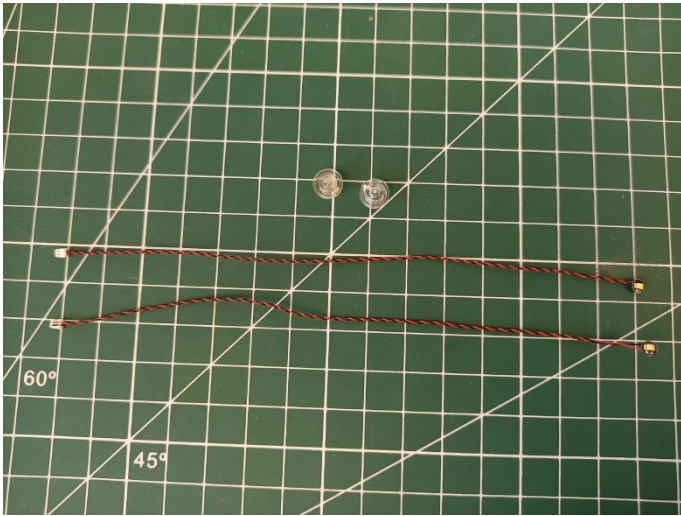
**8.** Turn to the front, remove the following piece.



**9.** Disconnect the following pieces.



**10. Take 2 white 15cm Dot Lights, 2 trans white 1x1 round plates (with opening).**

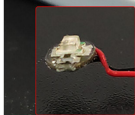


## **Tips**

The plate without slit:

### **The plate without slit:**

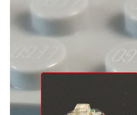
The squeeze causes the protective layer of the wire to be torn apart, the positive and negative wires touch together, and the set is short-circuited and the hot or wire is crushed, the wire to be disconnected and don't work.



The plate with slit:

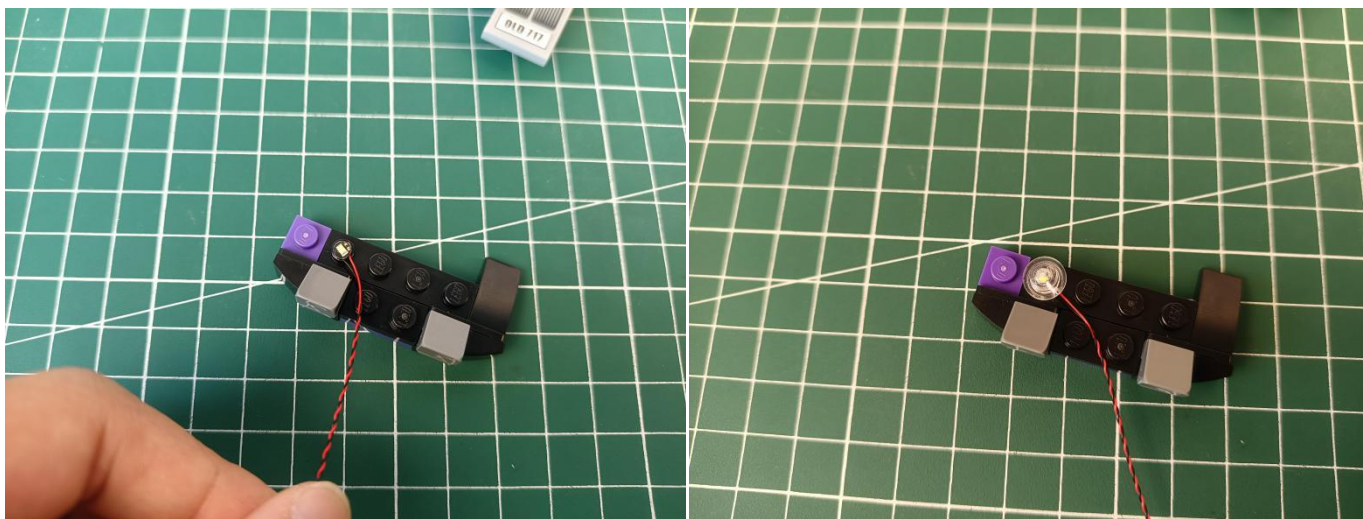
### **The plate with slit:**

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

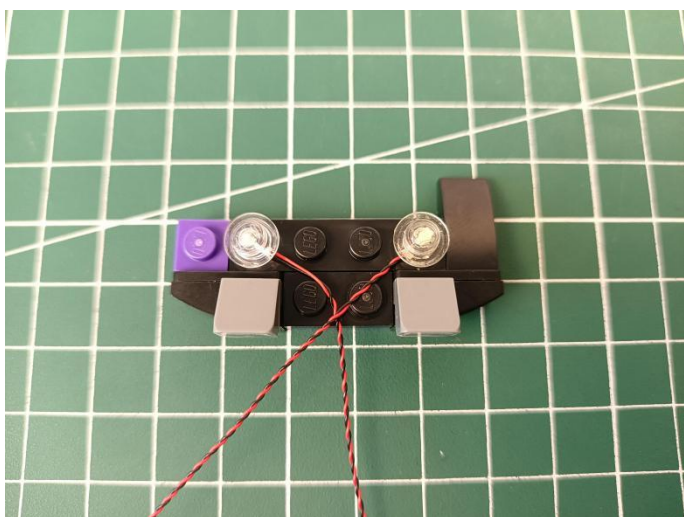


The slit on the the plate round 1X1 are hand-made to avoid squeeze the wire and cause short circuit and abnormal heat during installation.

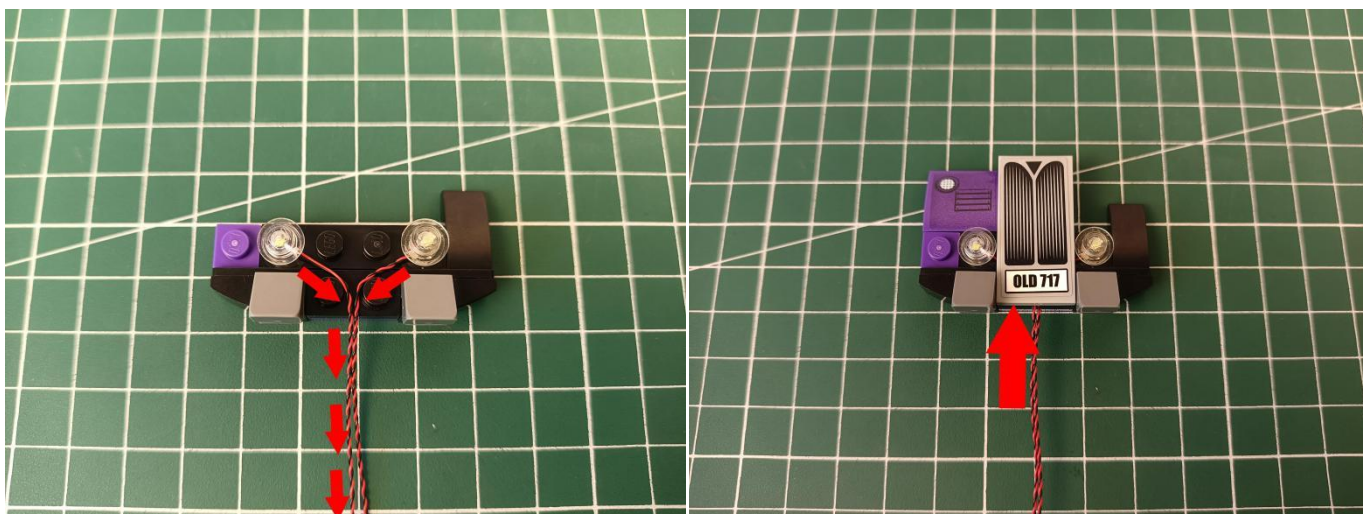
**11.**With lighting part facing up, connect the white round plate over, stuck the cable at the opening.



**12.**Install the light at the other side in the same way.



**13.**Place the cables as per below, reconnect the piece.



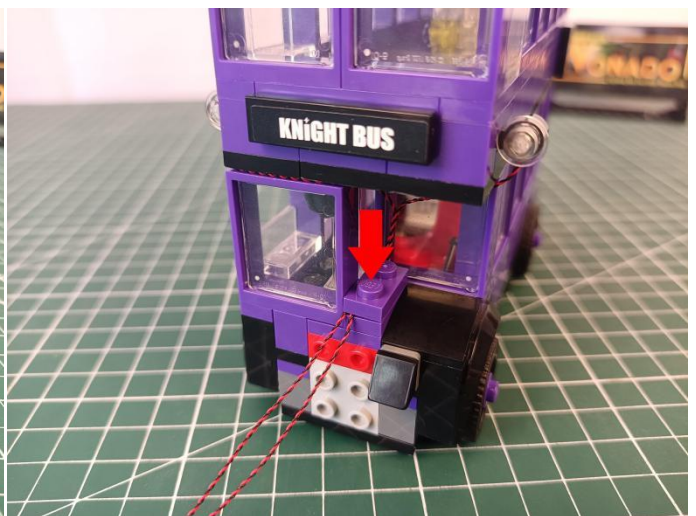
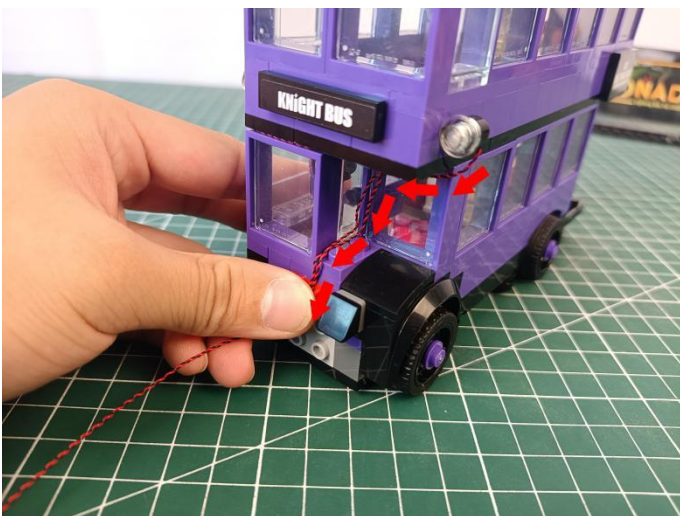
## 14. Reconnect it to the bus.



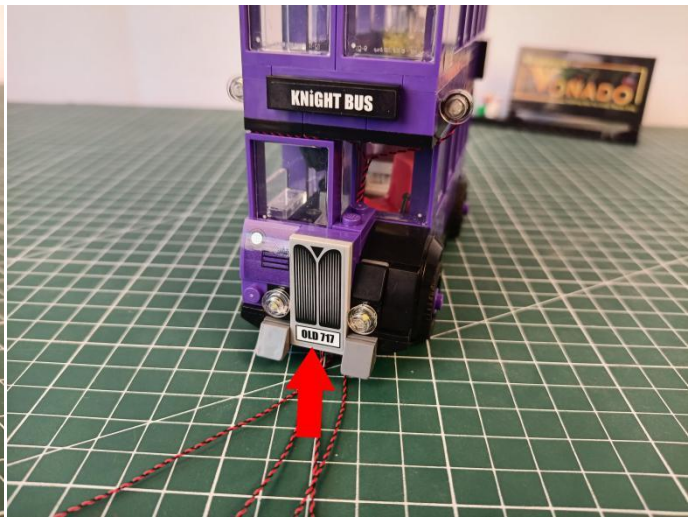
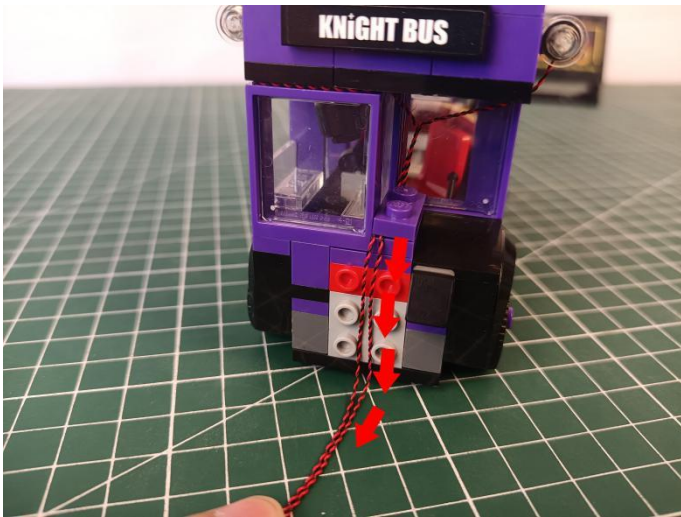
## 15. Remove the following plate.



## 16. Place the 2 cables as per below, reconnect the plate.



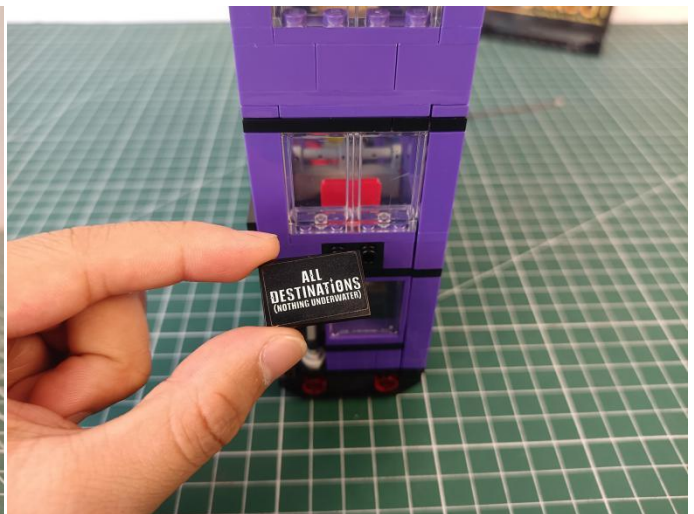
**17.**Place the cables as per below, reconnect the following piece.



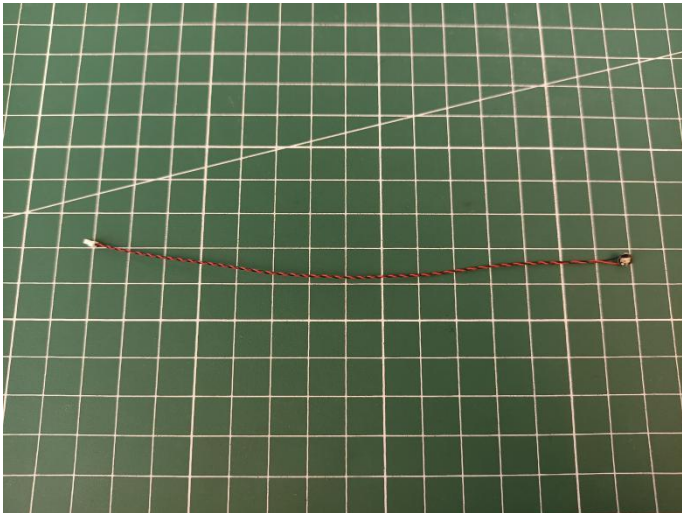
**18.**Turn to the tail.



**19.**Remove the following signboard.



**20.** Take a green 15cm Flashing Dot Light.



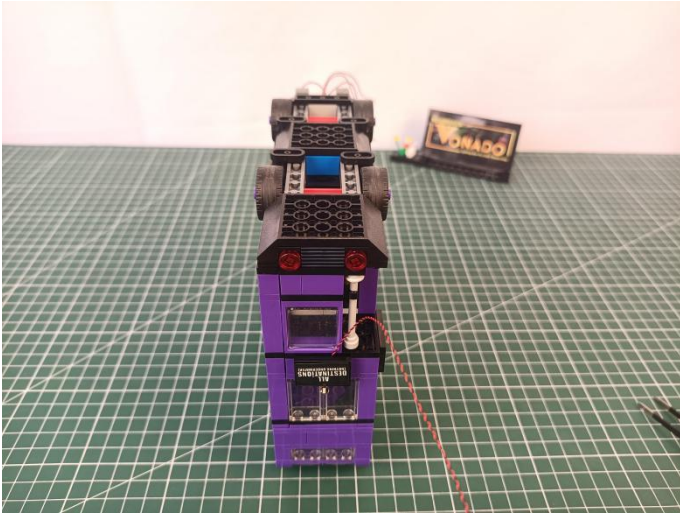
**21.** With lighting part facing up, reconnect the signboard.



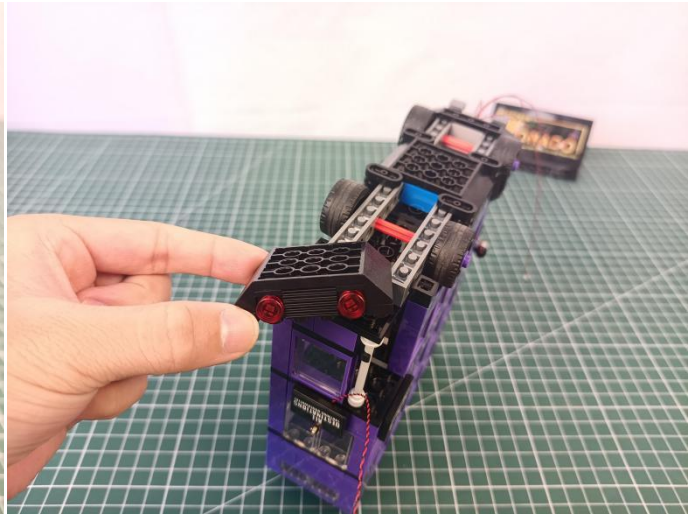
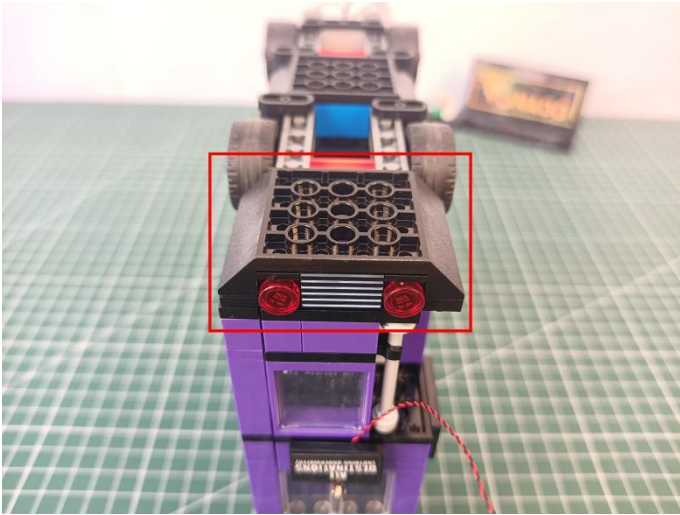
**22.** Put the light down, make the lighting part facing down.



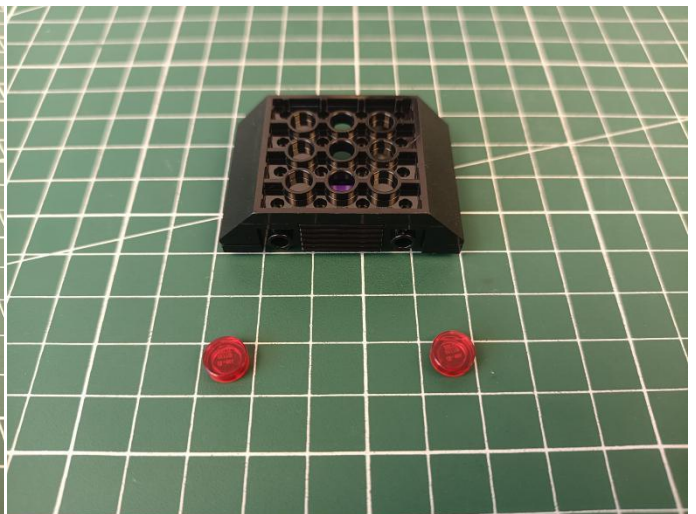
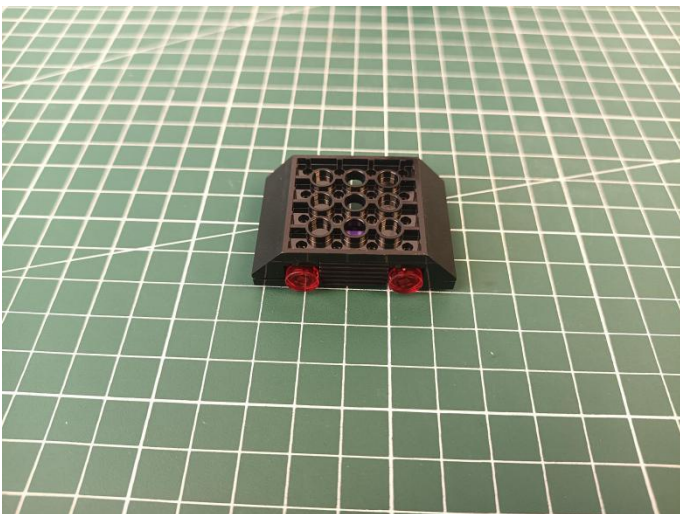
**23.** Turn to the bottom.



**24.** Remove the following black piece.

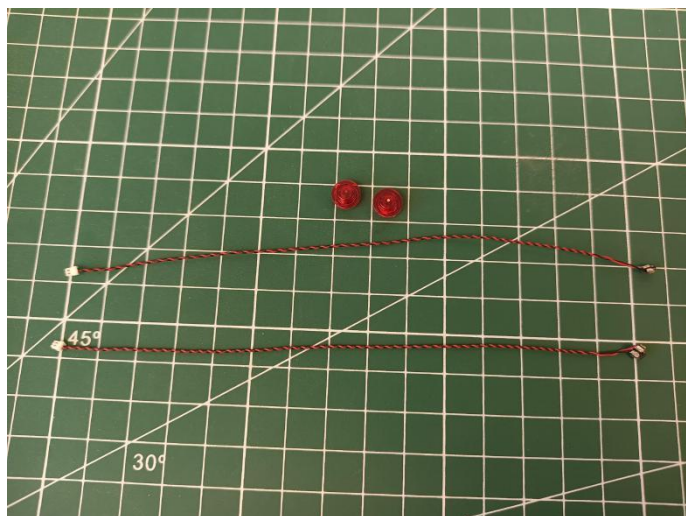


**25.** Disconnect the red round plates.

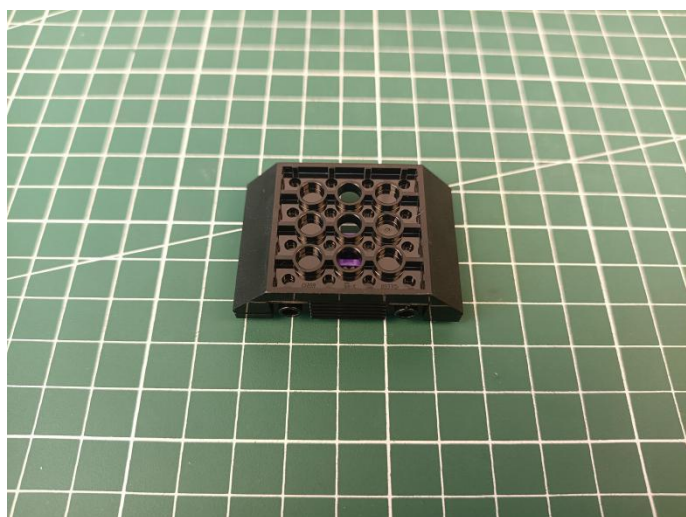




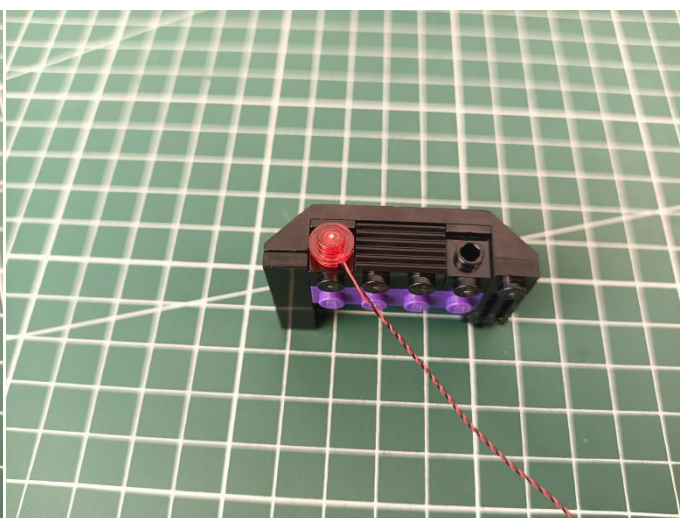
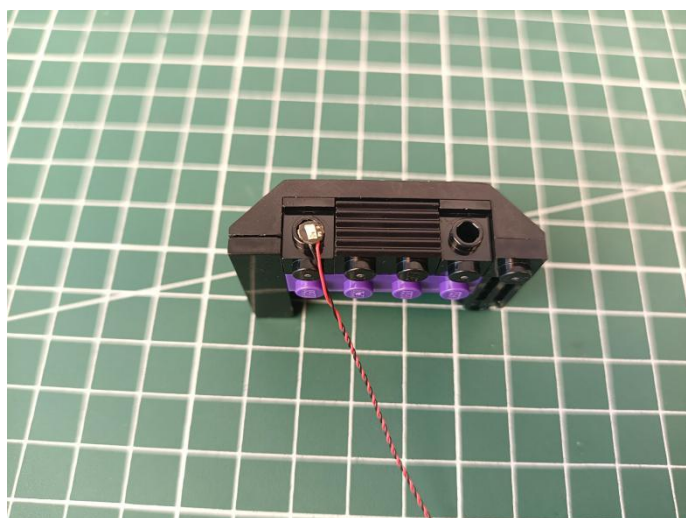
**26.**Take 2 red 15cm Flashing Dot Lights, 2 trans red 1x1 round plates (with opening).



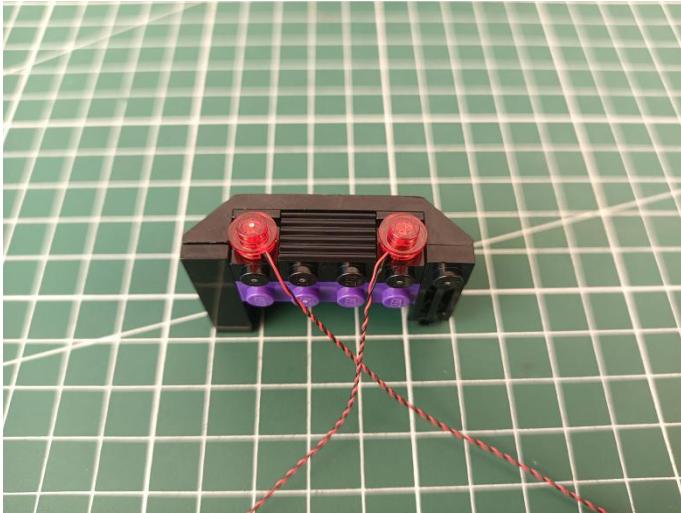
**27.**Put the black piece upright as per below.



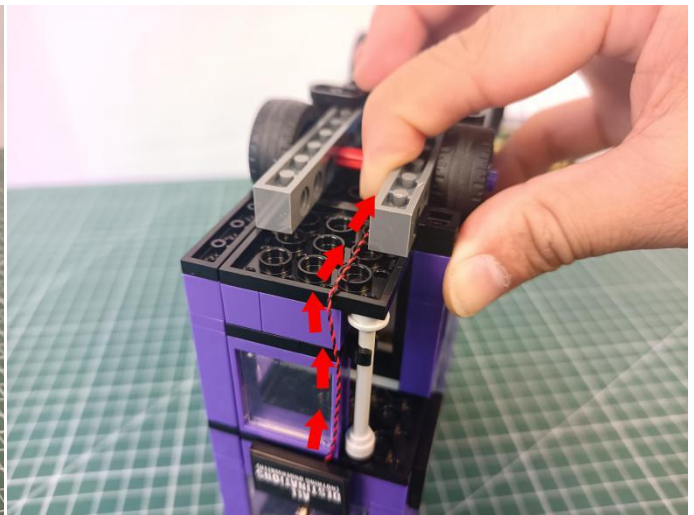
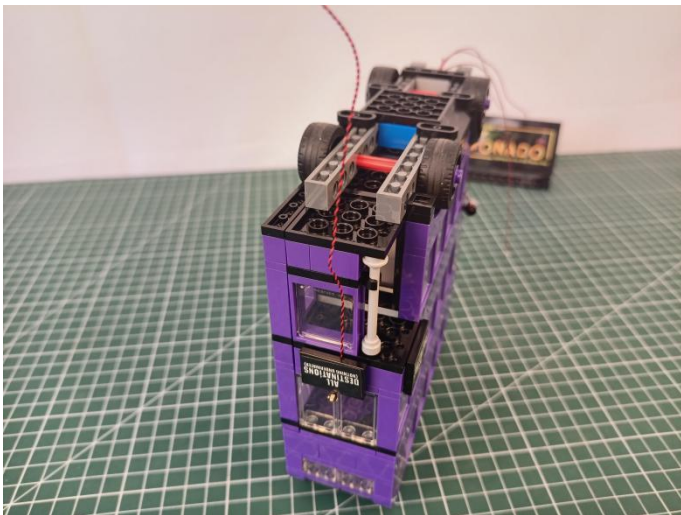
**28.**With lighting part facing up, connect the red round plate over, stuck the cable at the opening.



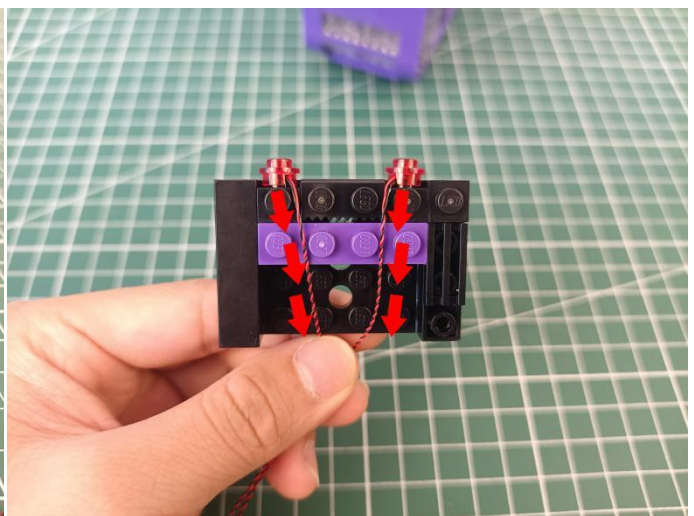
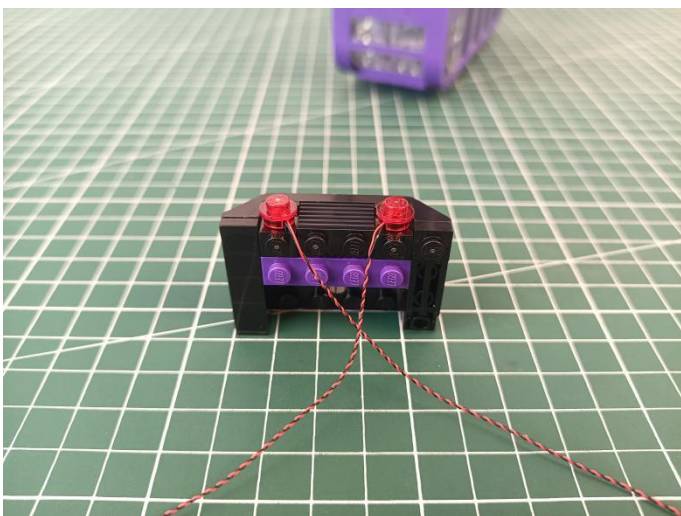
**29.**Install the light at the other side in the same way.



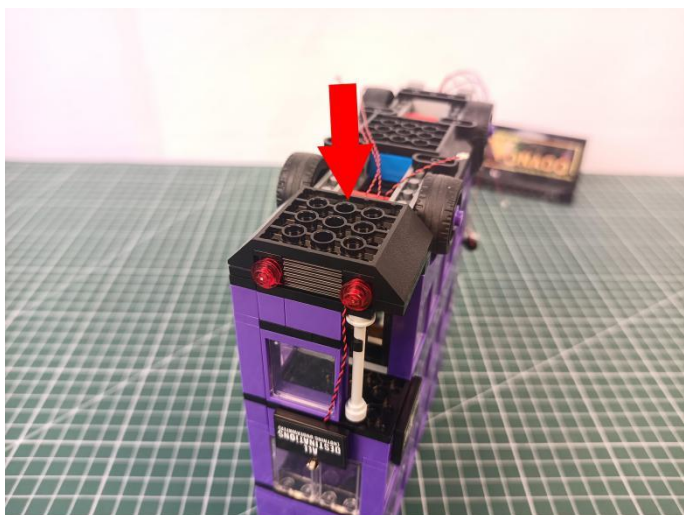
**30.**Place the cable from the signboard as per below.



**31.**Place the 2 cables as per below.



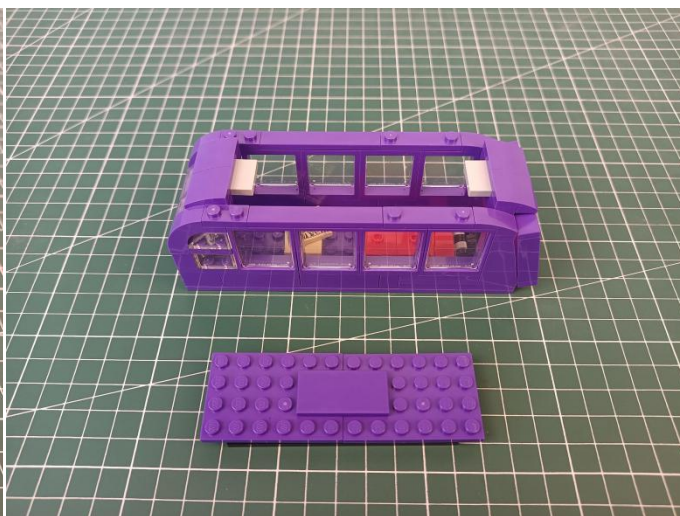
### 32. Reconnect the black piece.



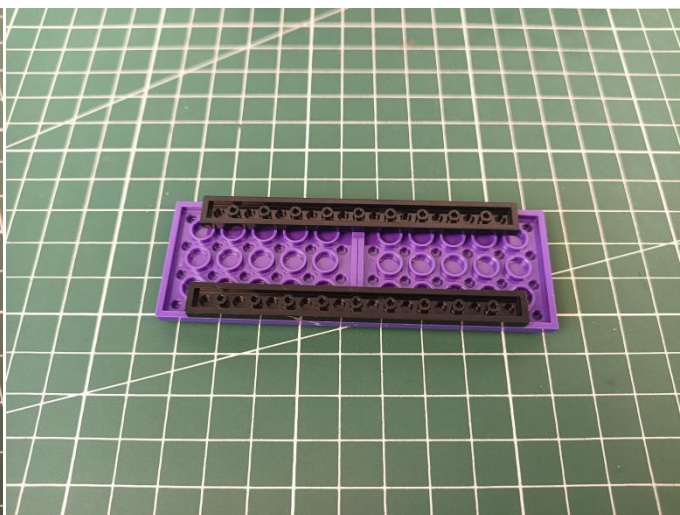
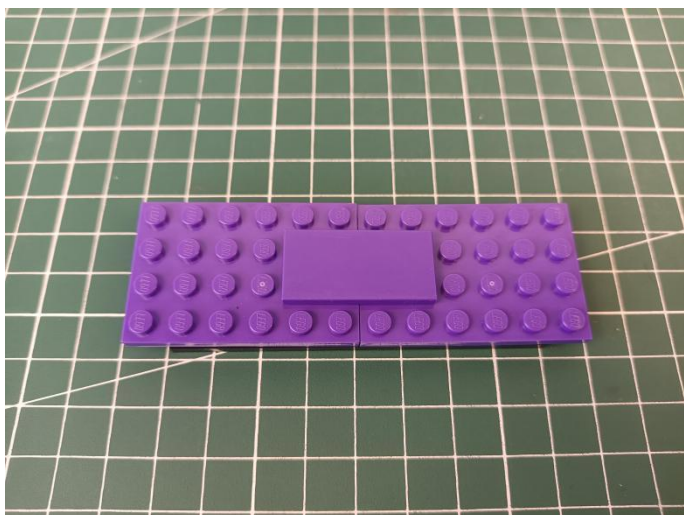
### 33. Turn to the side, remove the top floor of the bus.



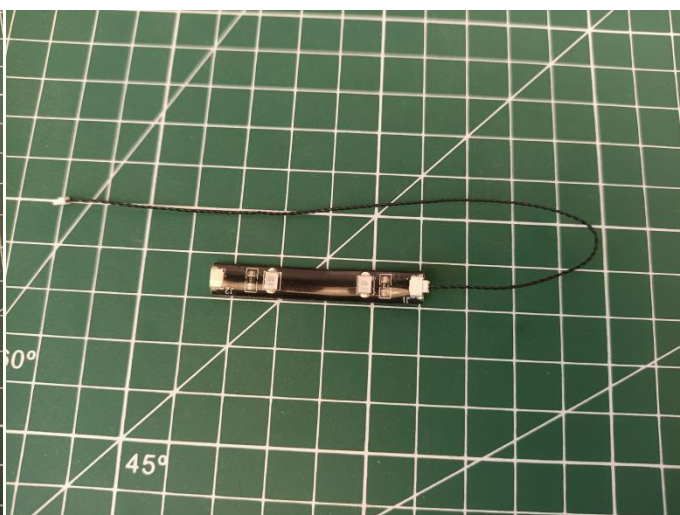
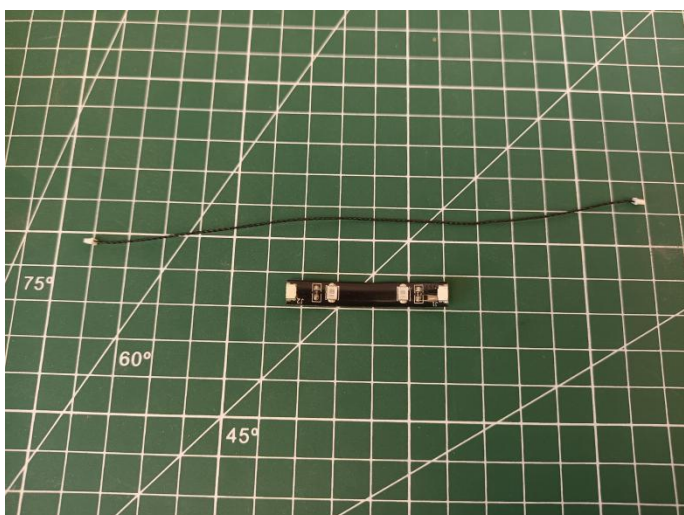
### 34. Remove the following piece.



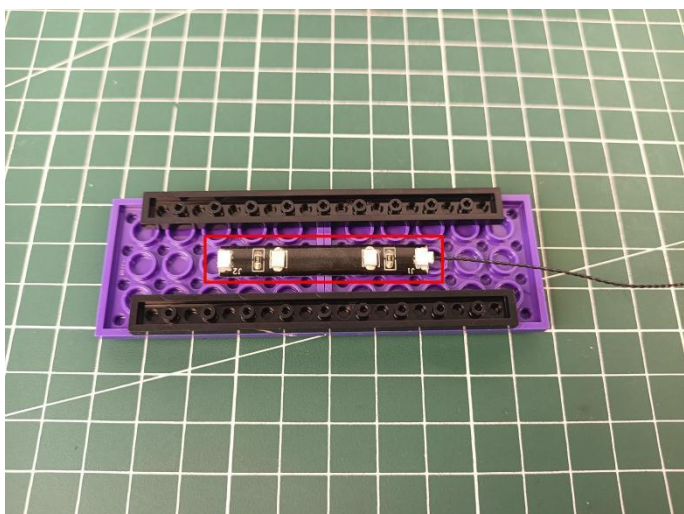
**35.** Turn the piece to the back.



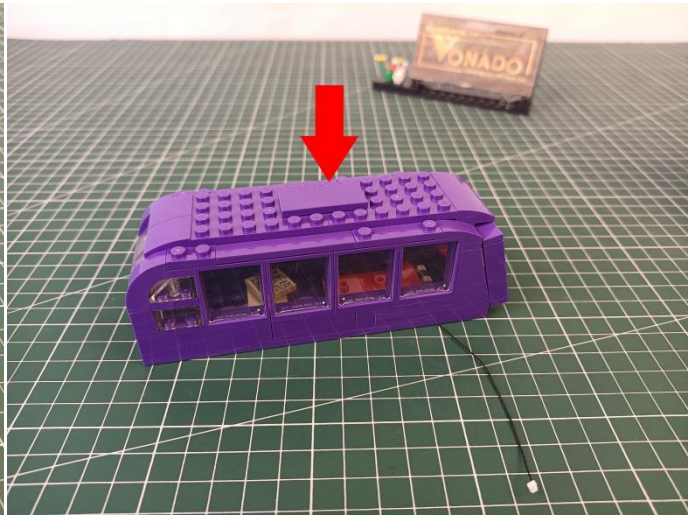
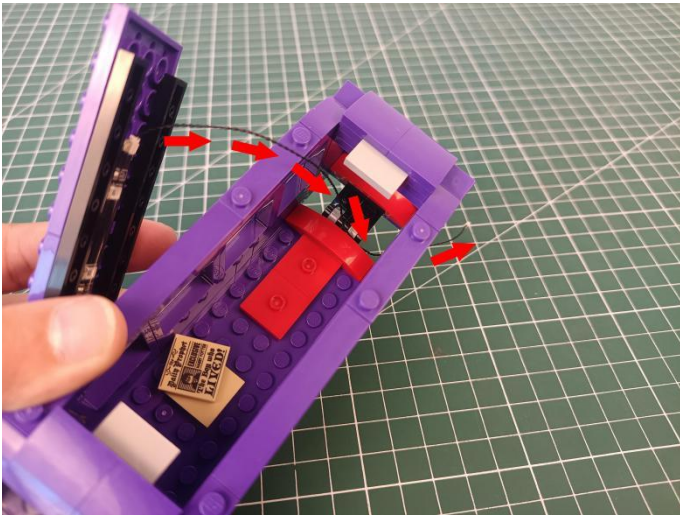
**36.** Take a 15cm connecting cable, a blue strip light, assemble the as per below.



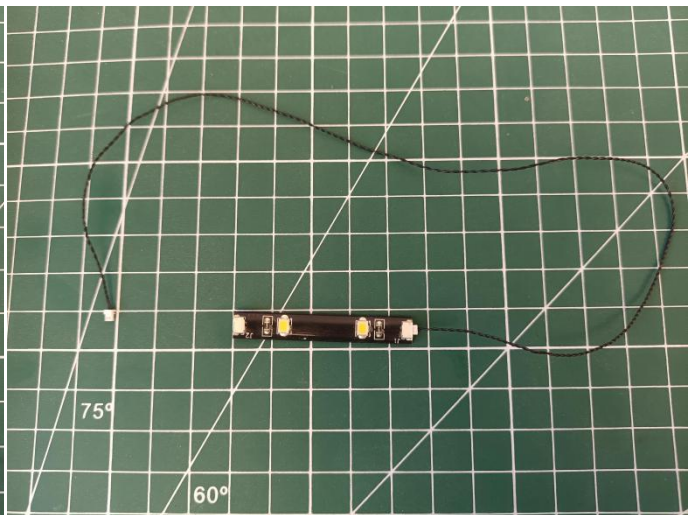
**37.** Stick the strip light to the following place.



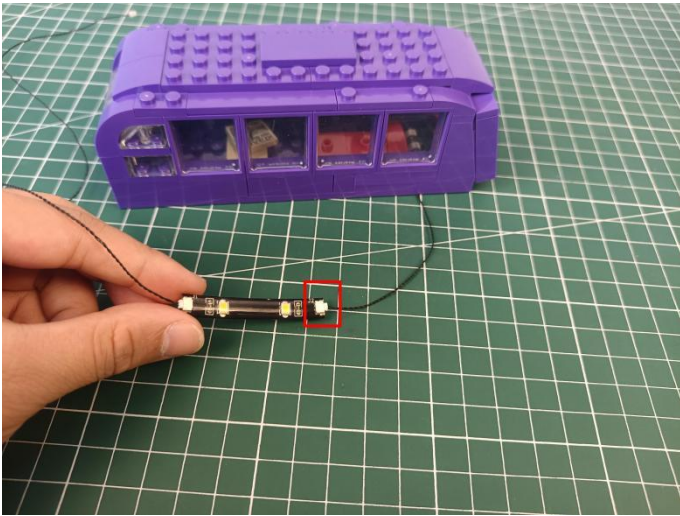
**38.** Thread the cable through the following space and reconnect the piece.



**39.** Take a 30cm connecting cable, a warm white strip light, assemble the as per below.



**40.** Connect the cable from the top floor to the warm white strip light.



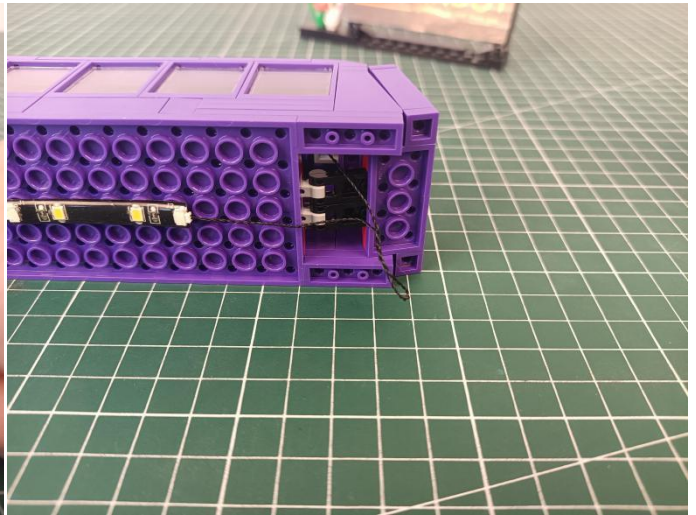
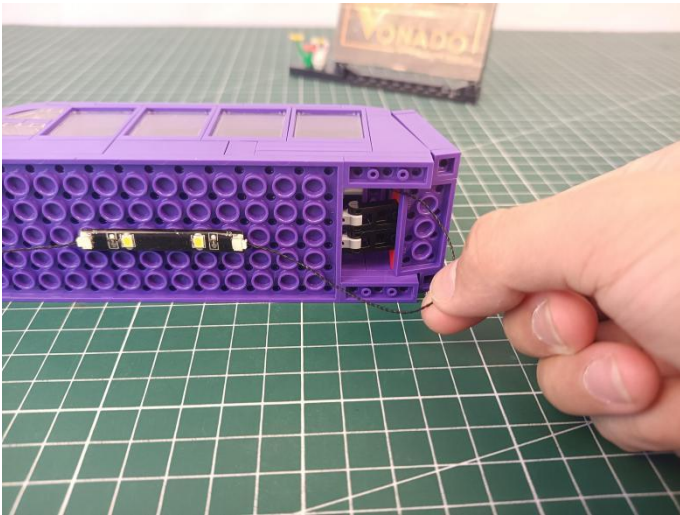
**41.** Turn the top floor over.



**42.** Stick the strip light to the following place.



### 43. Screw the excess cable together.



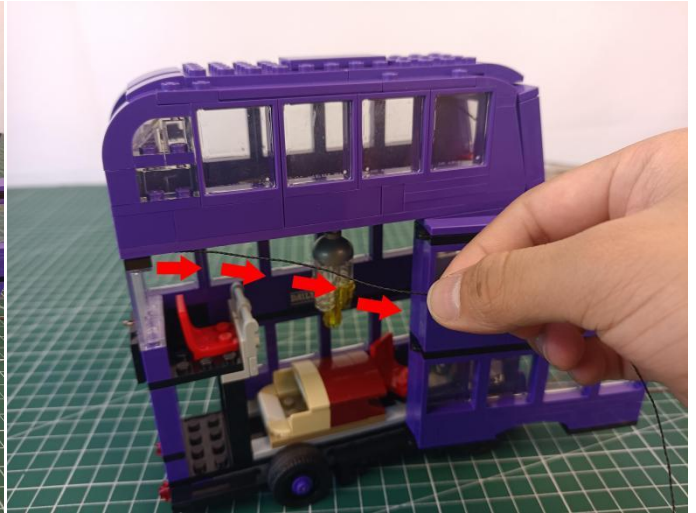
### 44. Reconnect the top floor.



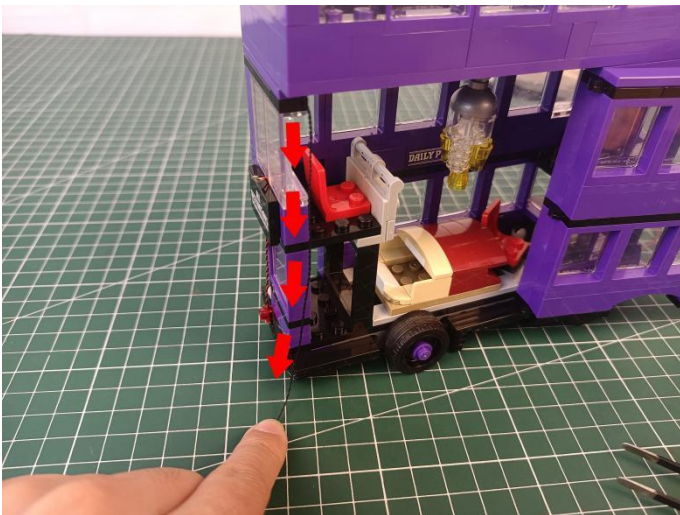
### 45. Open the door.



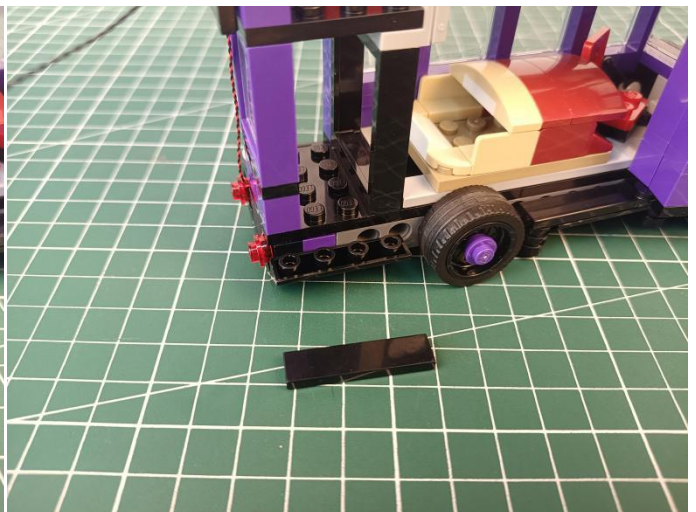
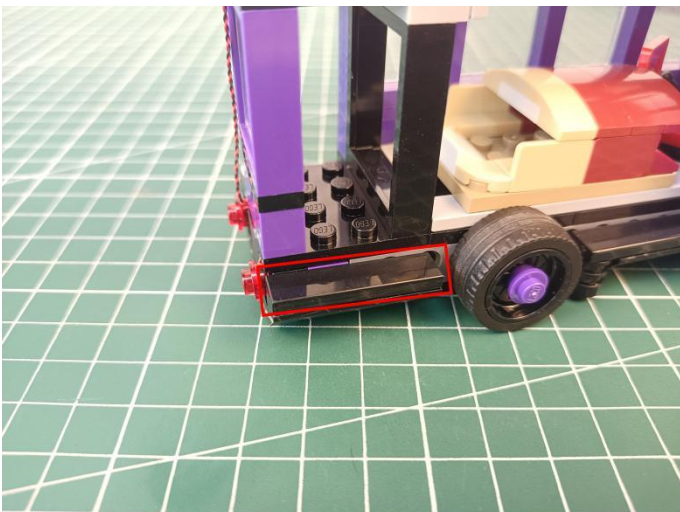
**46.** Thread the cable to the inside.



**47.** And place the cable as per below.

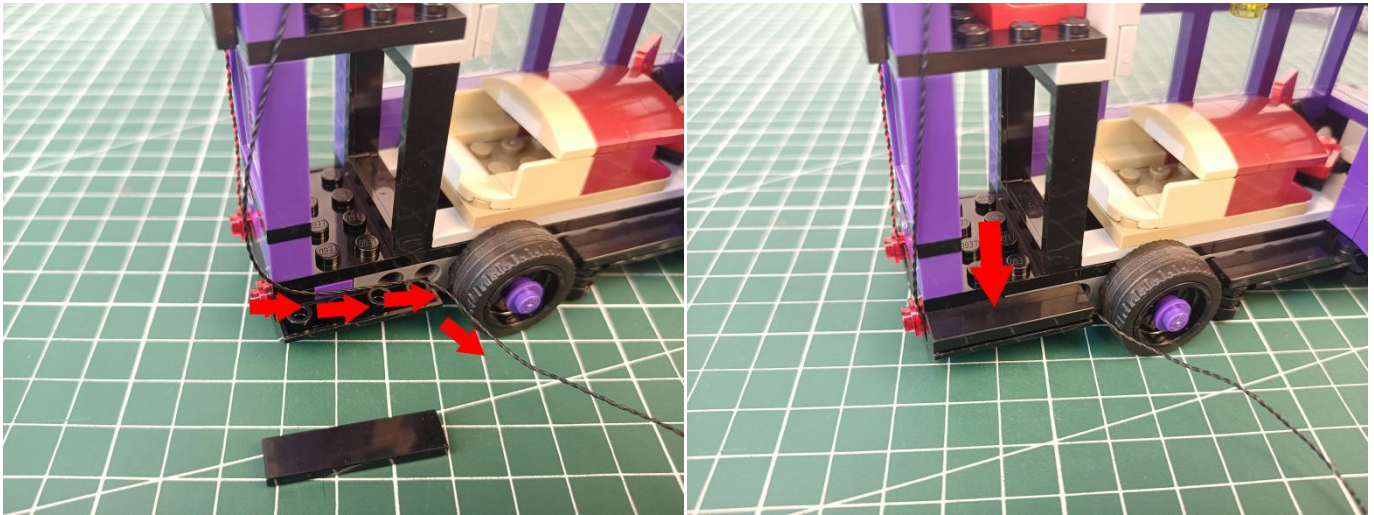


**48.** Remove the following plate.

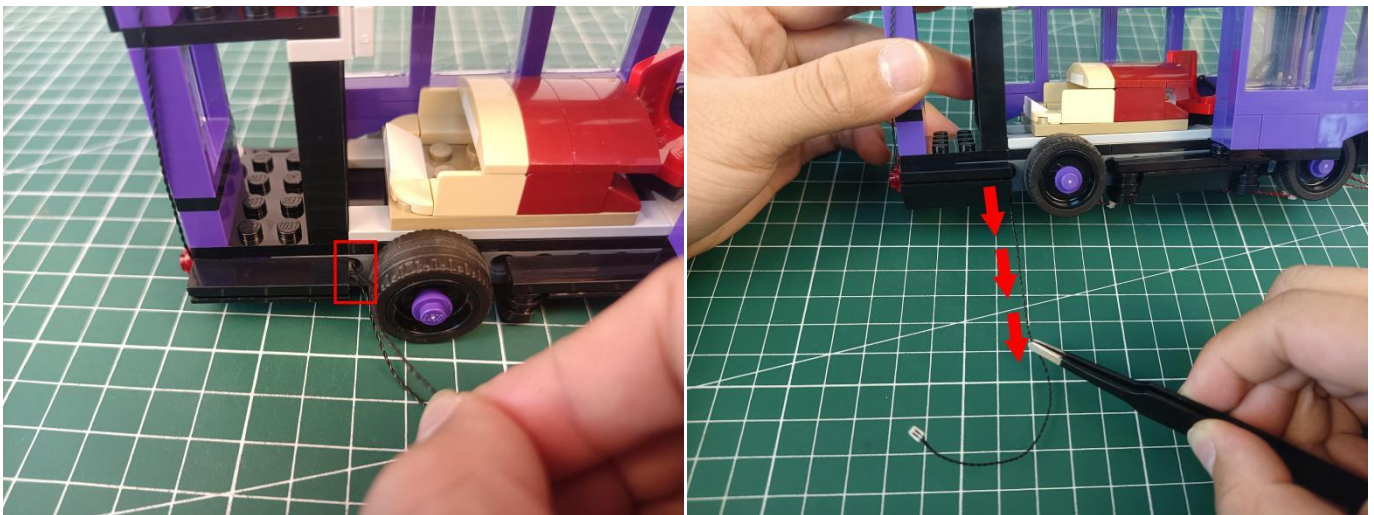




**49.**Place the cable as per below, reconnect the plate.



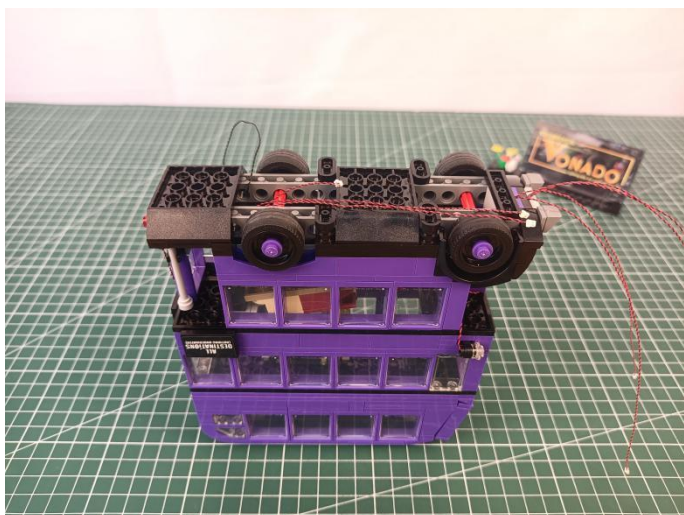
**50.**Thread the cable through the following hole, and pull it out from the bottom.



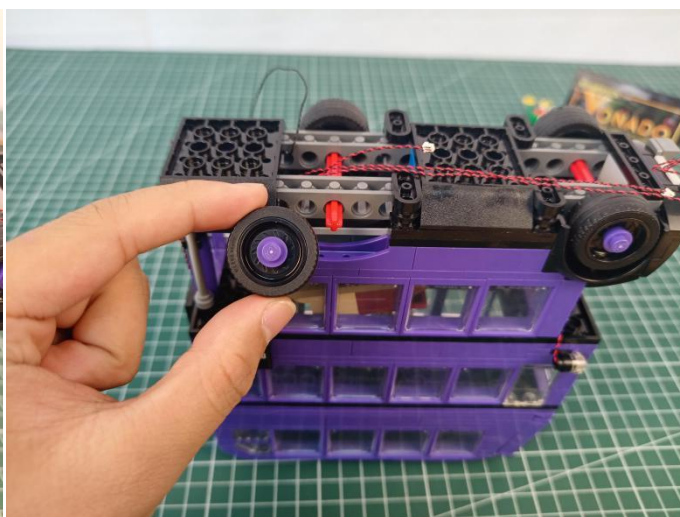
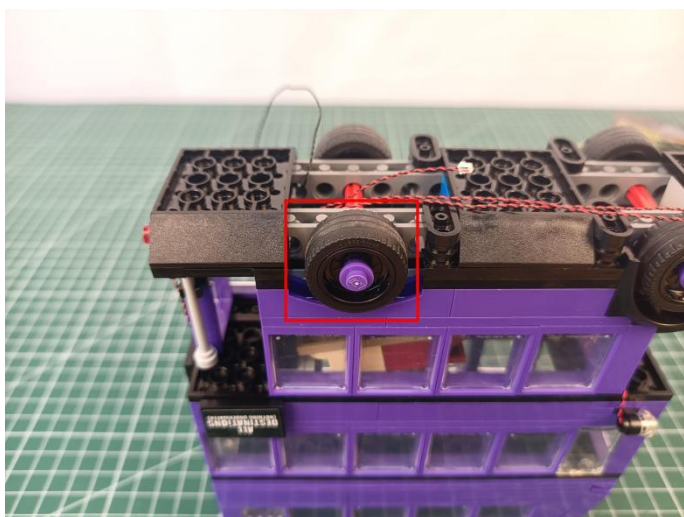
**51.**Close the door.



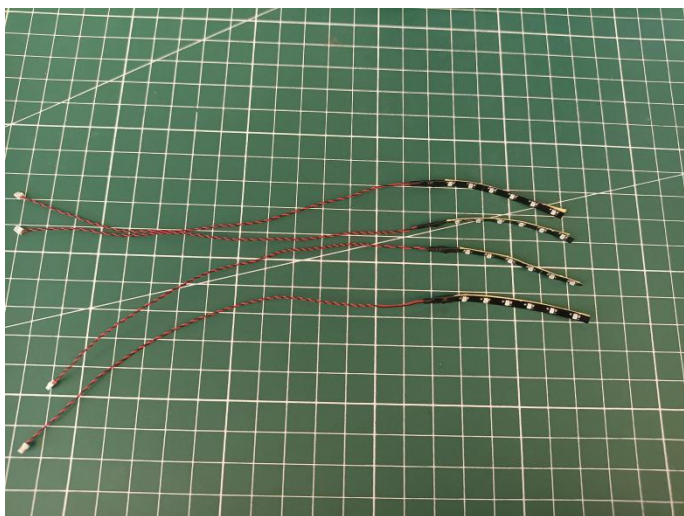
**52.** Turn the bus to the bottom.



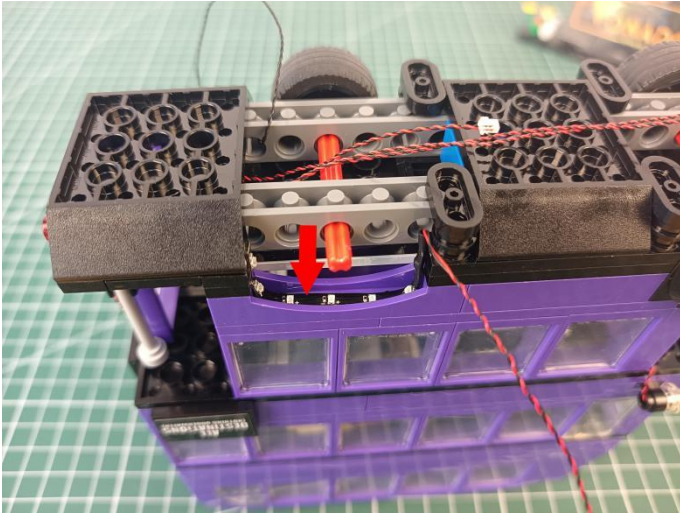
**53.** Remove the left wheel.



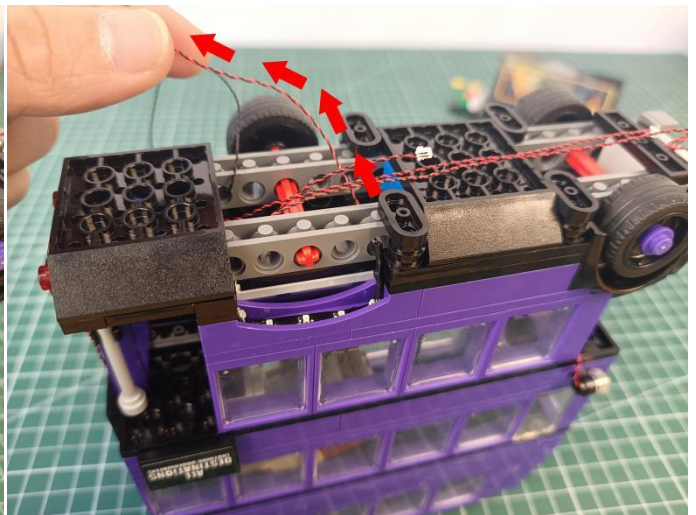
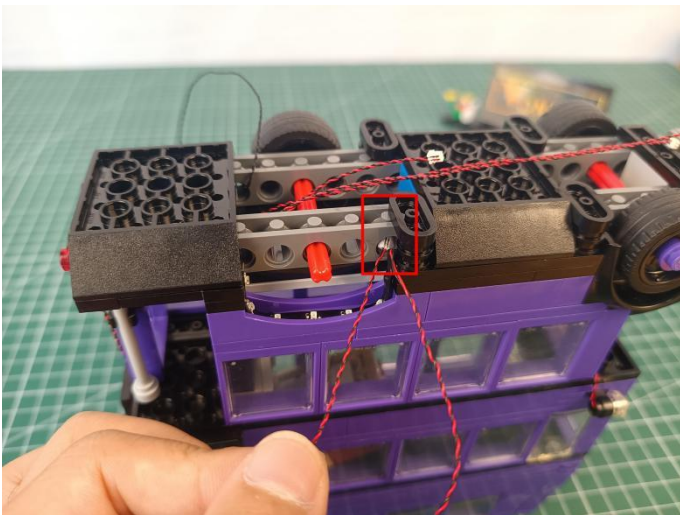
**54.** Take 4 green 15cm strip lights (with 7 lights).



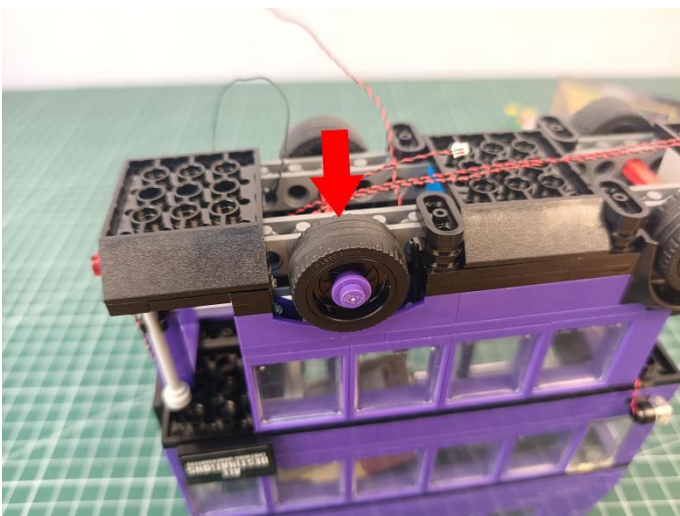
**55.**Stick a strip light to the following place.



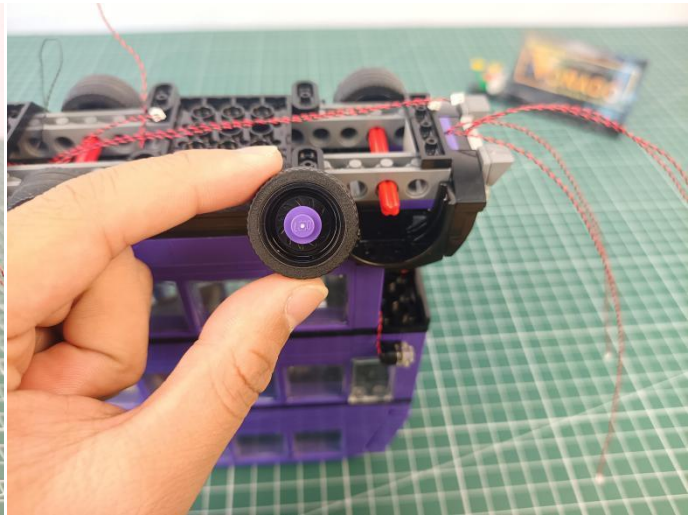
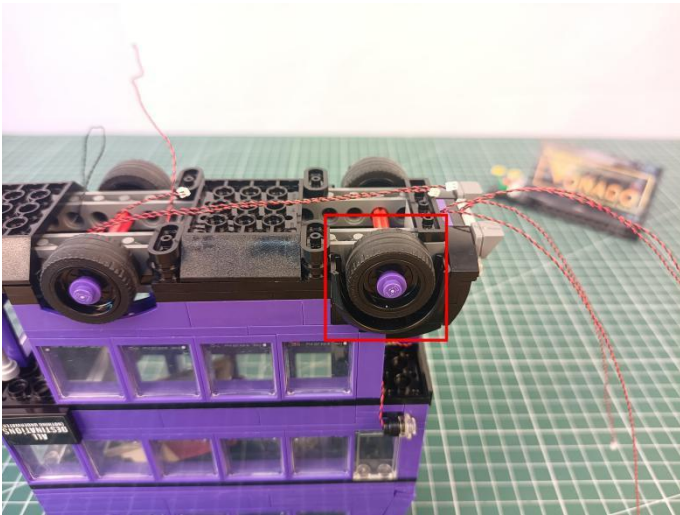
**56.**Thread the cable through the following hole, and pull it out.



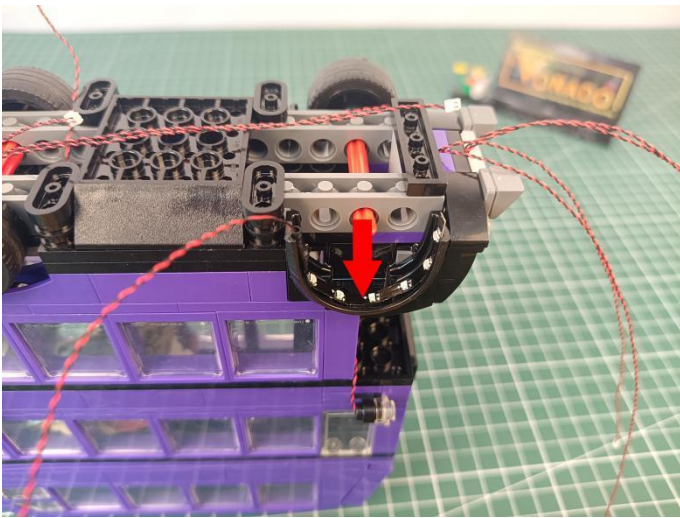
**57.**Reconnect the wheel.



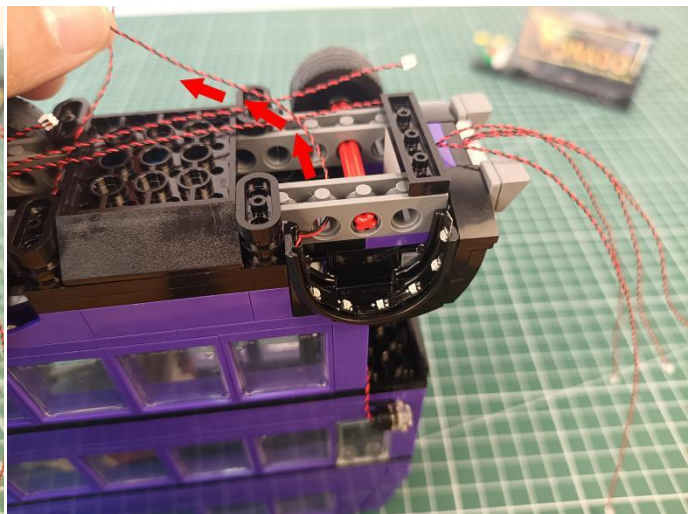
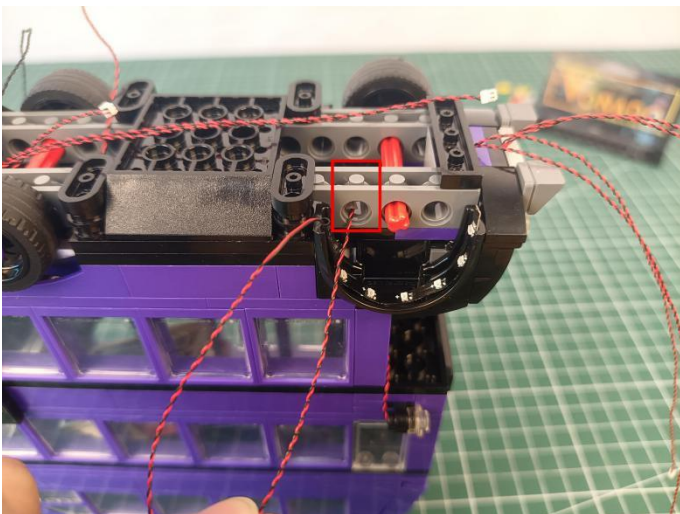
**58. Remove the right wheel.**



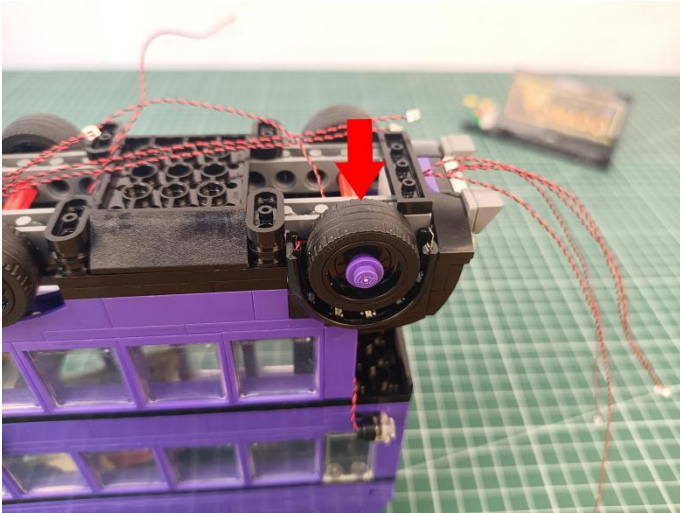
**59. Stick a strip light to the following place.**



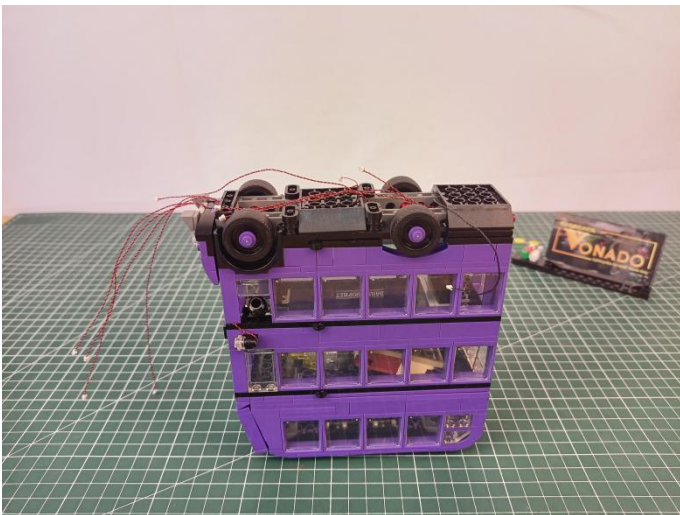
**60. Thread the cable through the following hole, and pull it out.**



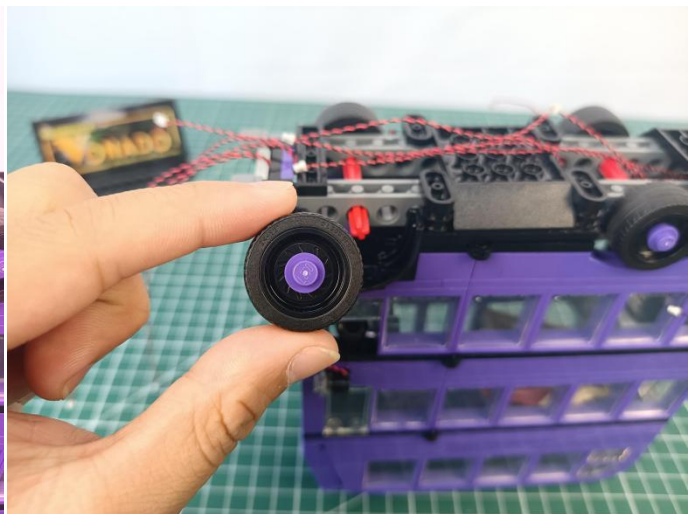
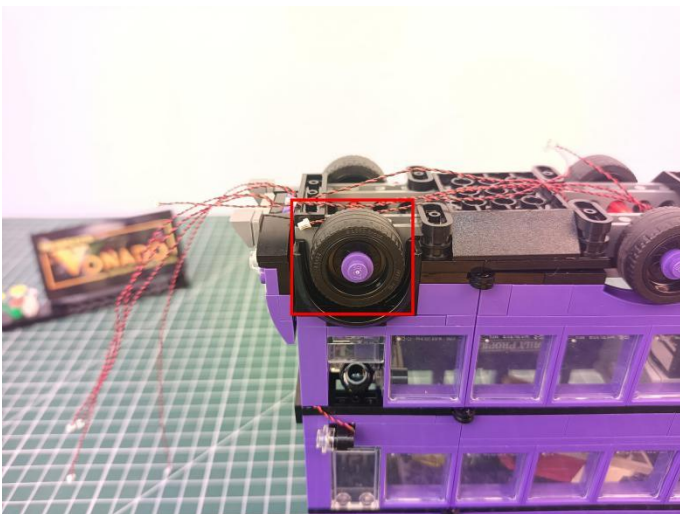
## 61. Reconnect the wheel.



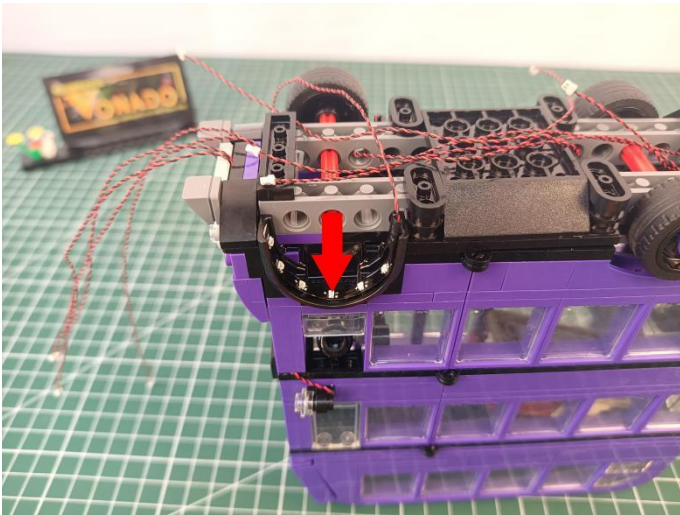
## 62. Turn the bus to the other side.



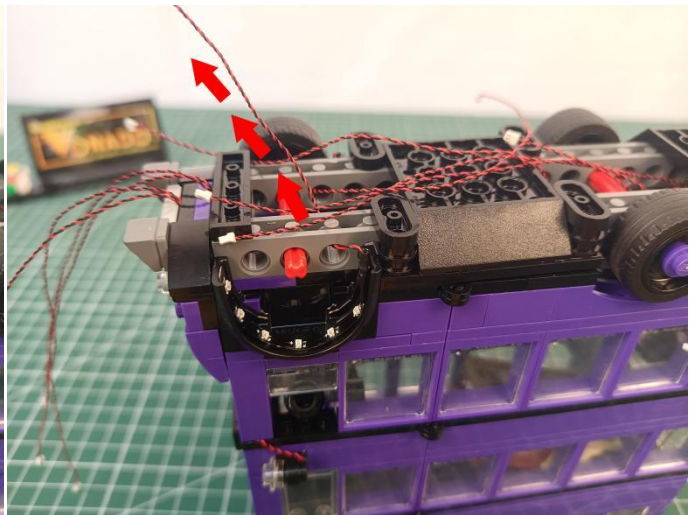
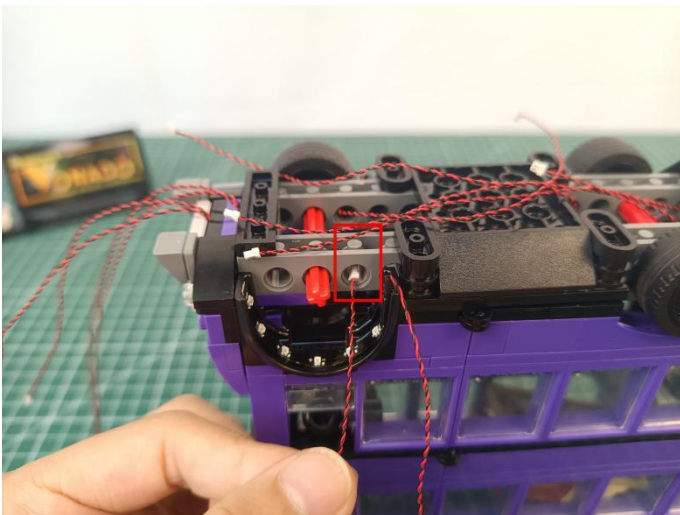
## 63. Remove the left wheel.



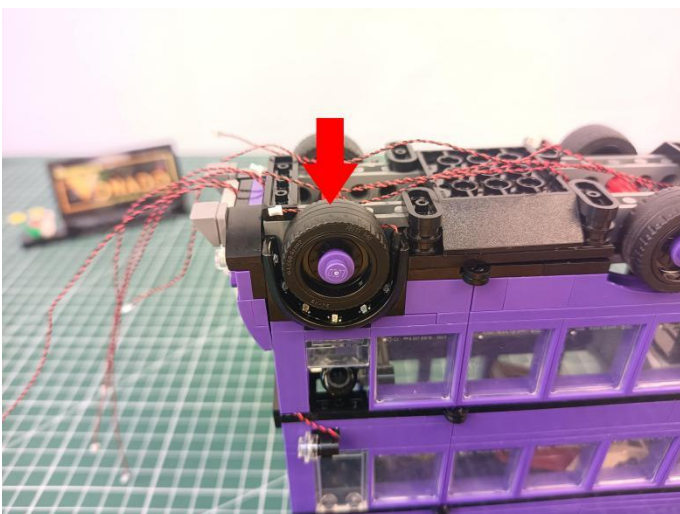
**64.**Stick a strip light to the following place.



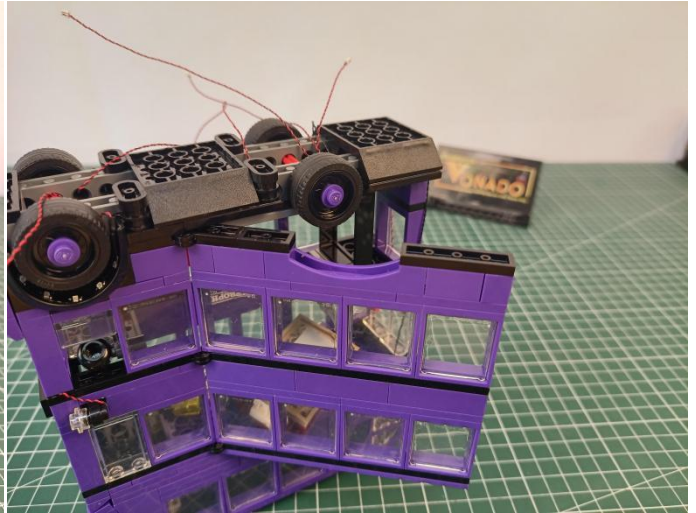
**65.**Thread the cable through the following hole, and pull it out.



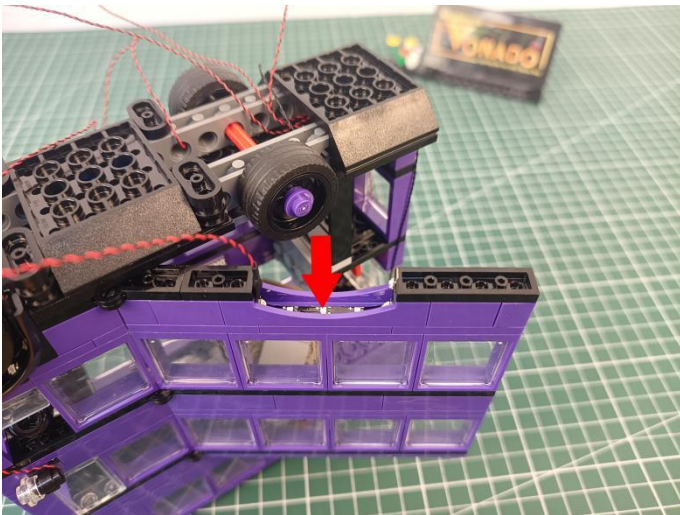
**66.**Reconnect the wheel.



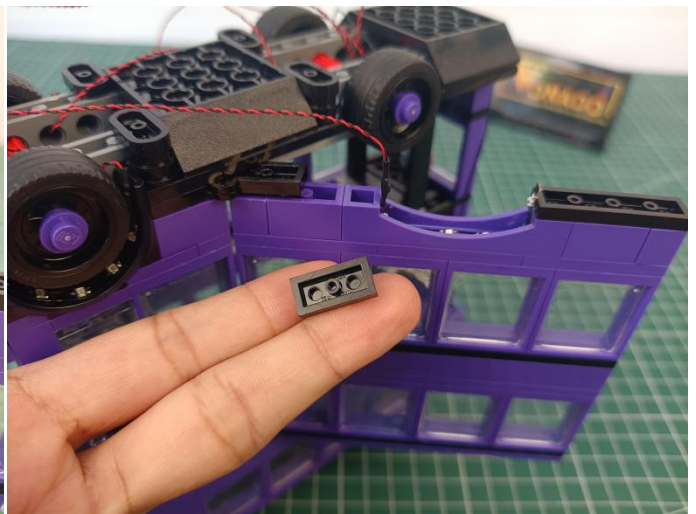
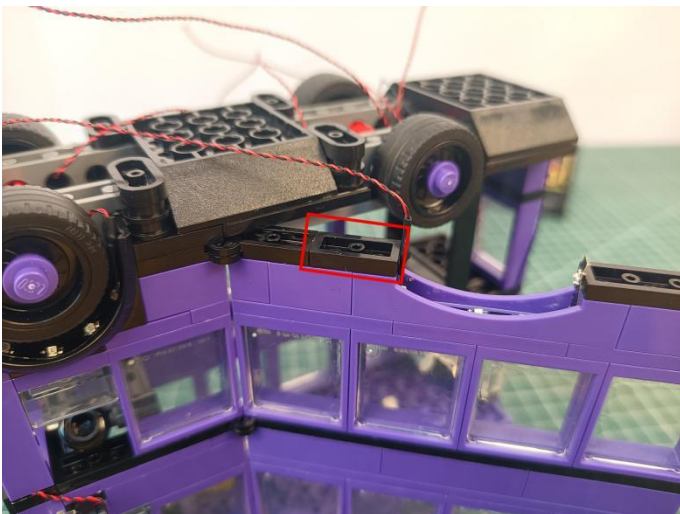
**67.** Turn to the right wheel, open the door.



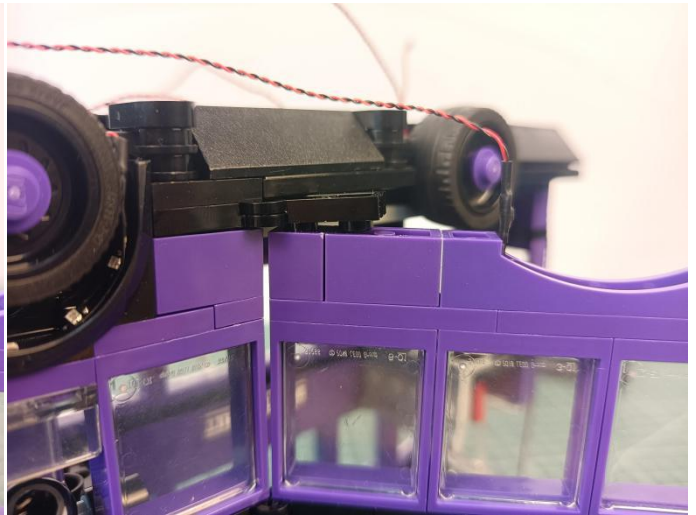
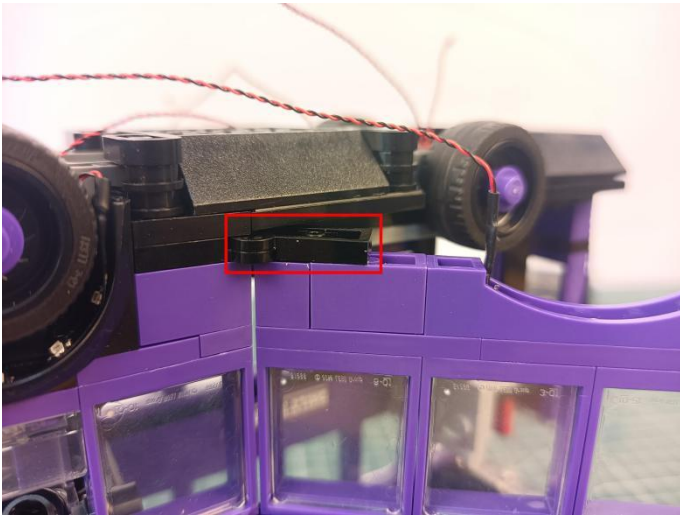
**68.** Stick a strip light to the following place.



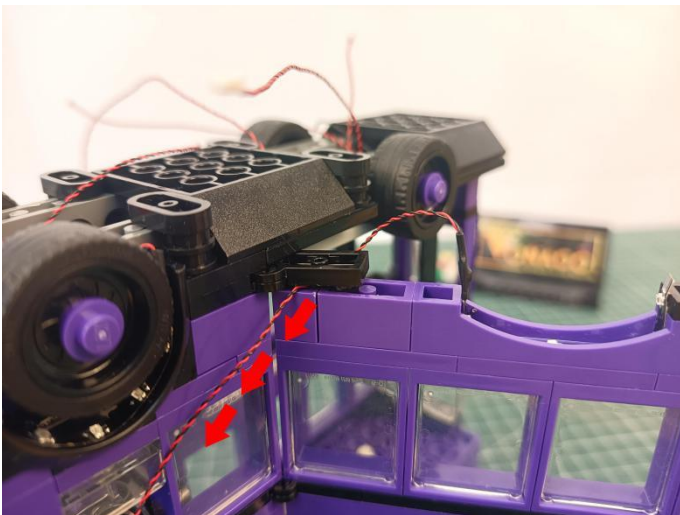
**69.** Remove the following black piece.



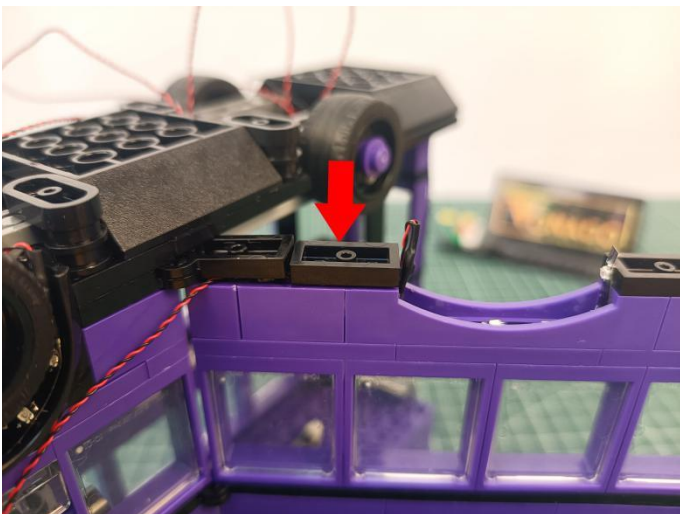
**70.** Create a gap at the following place.



**71.** Stuck the cable at the gap, close the gap.

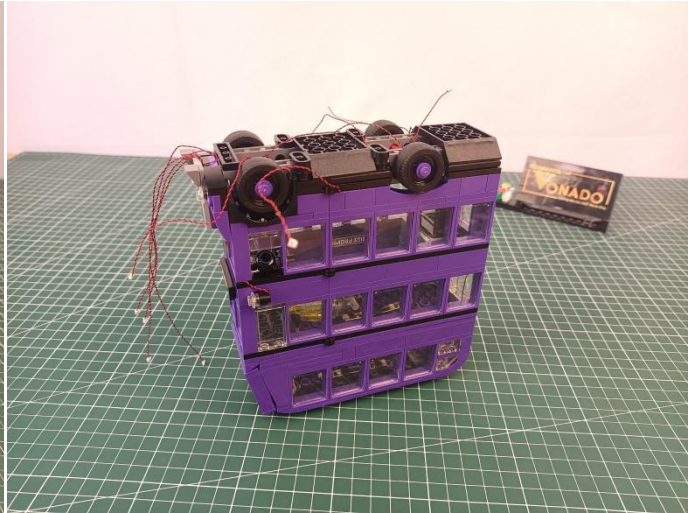
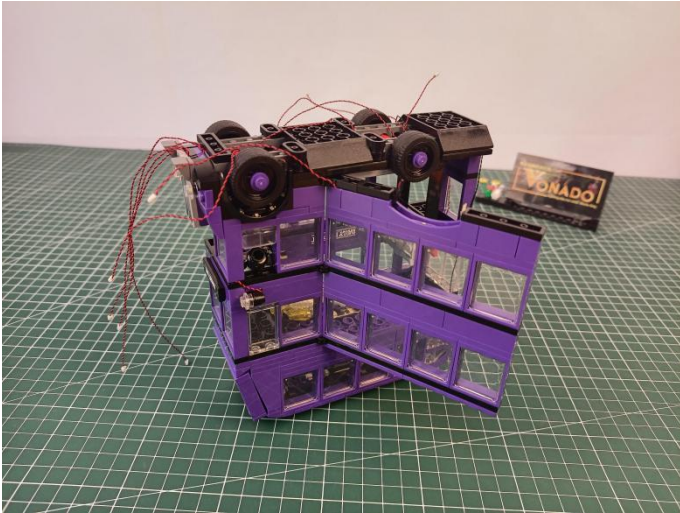


**72.** Reconnect the black piece.

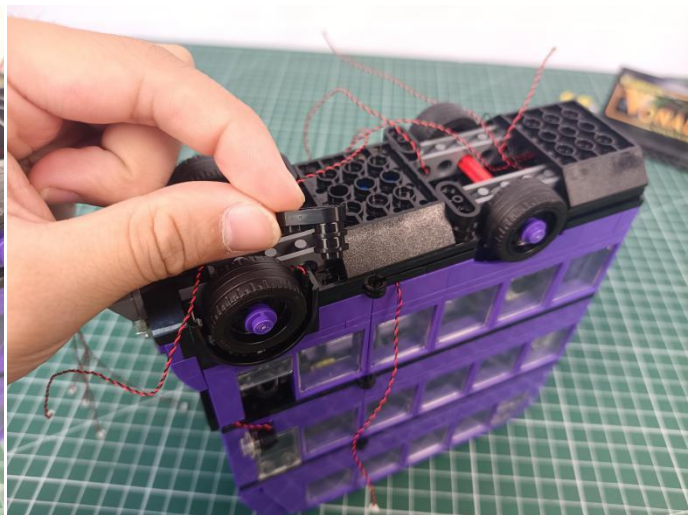
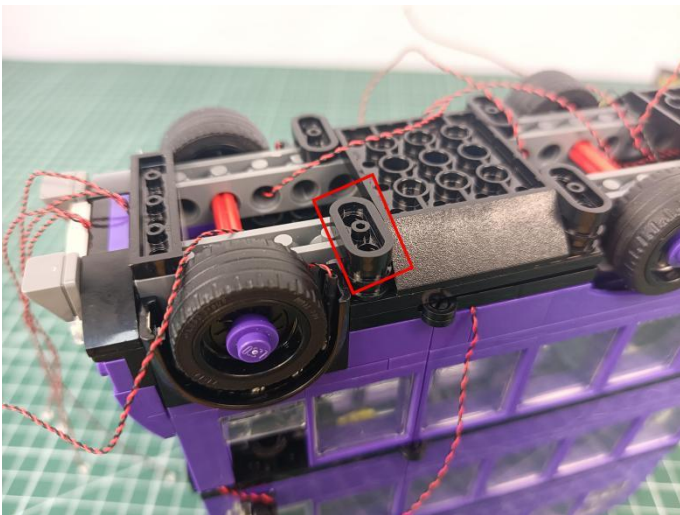




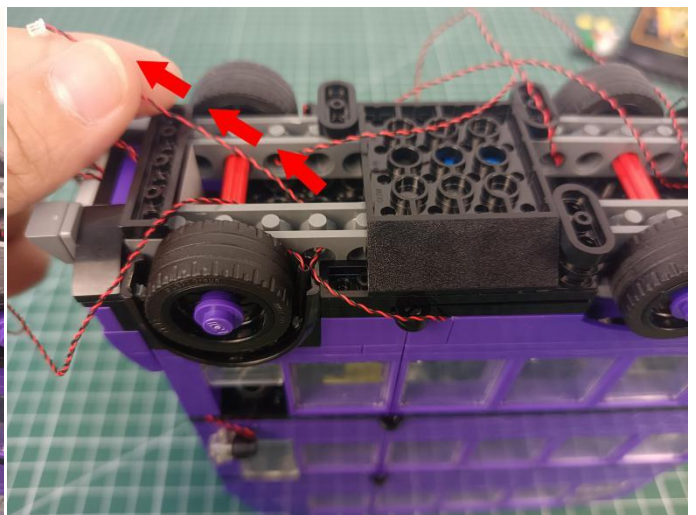
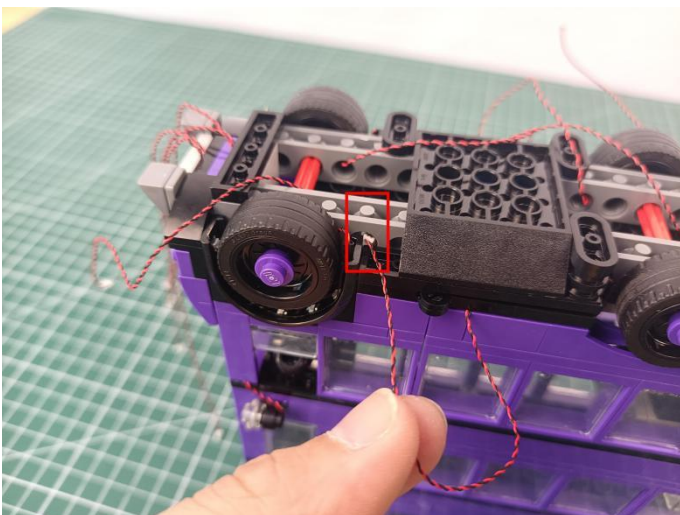
### 73. Close the door.



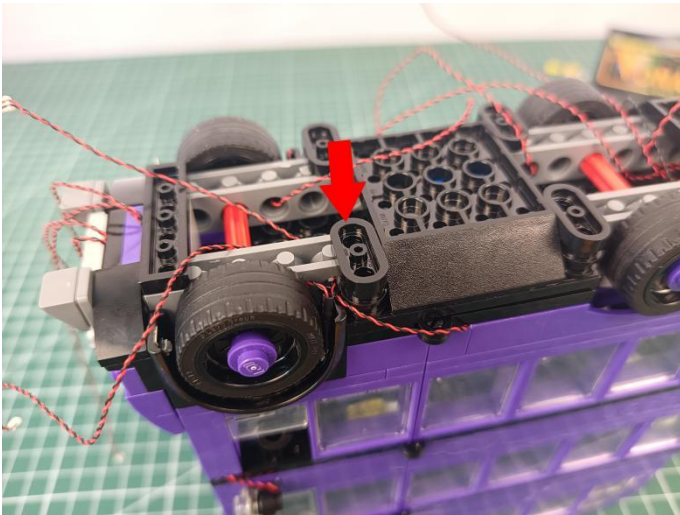
### 74. Remove the following black piece.



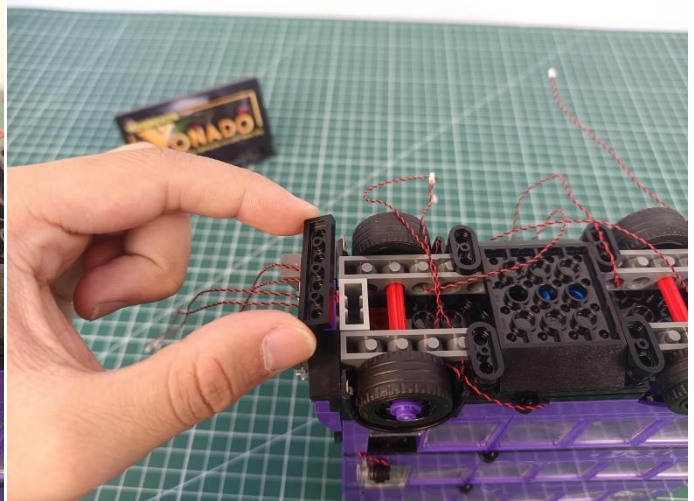
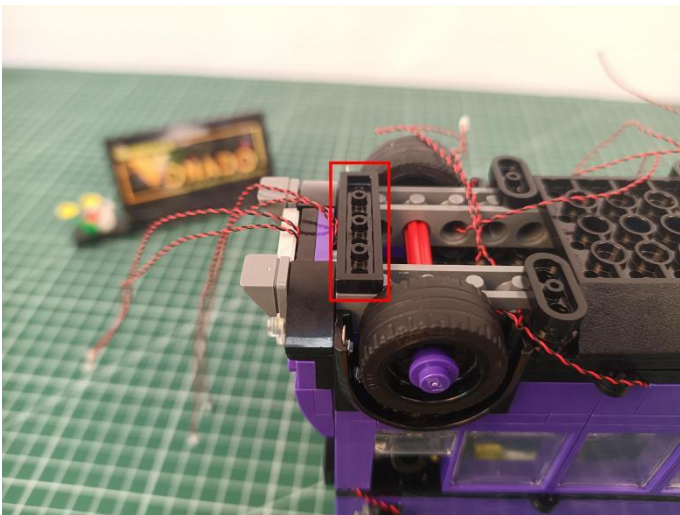
### 75. Thread the cable from the right strip light through the following hole, and pull it out.



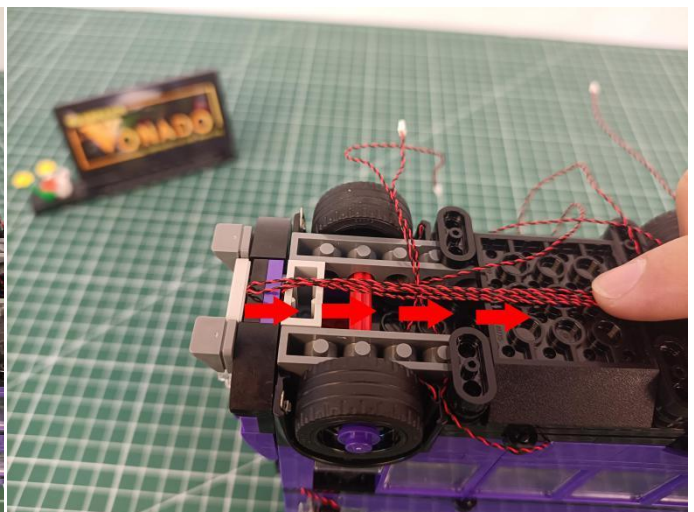
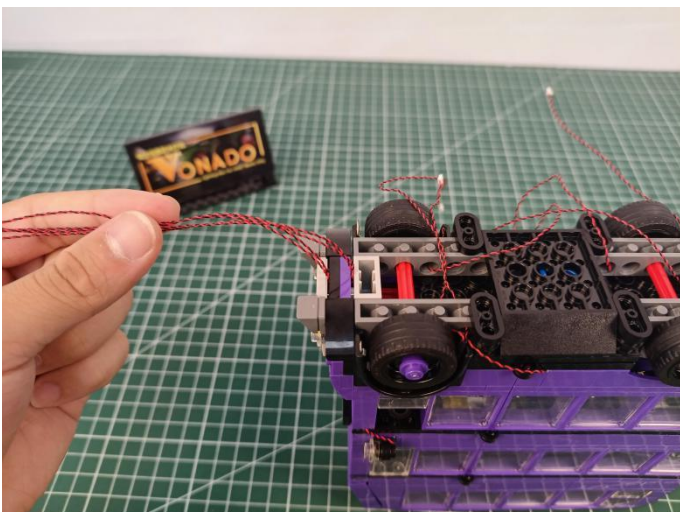
**76.**Remove the following black piece.



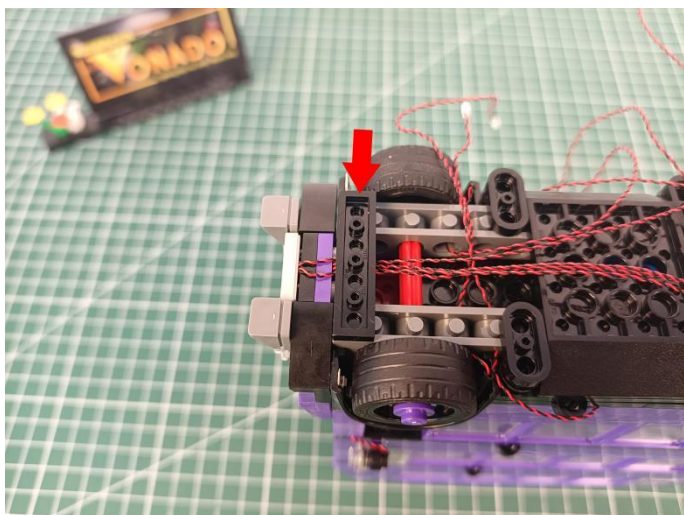
**77.**Reconnect the black piece.



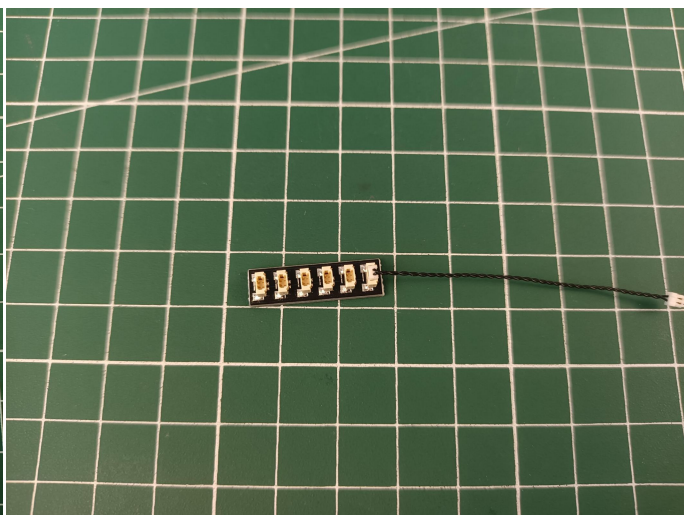
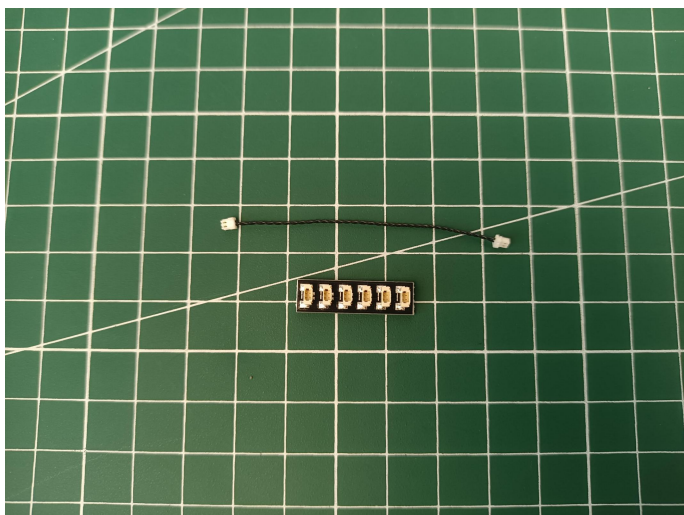
**78.**Take the following 4 cables from the head and place them as per below.



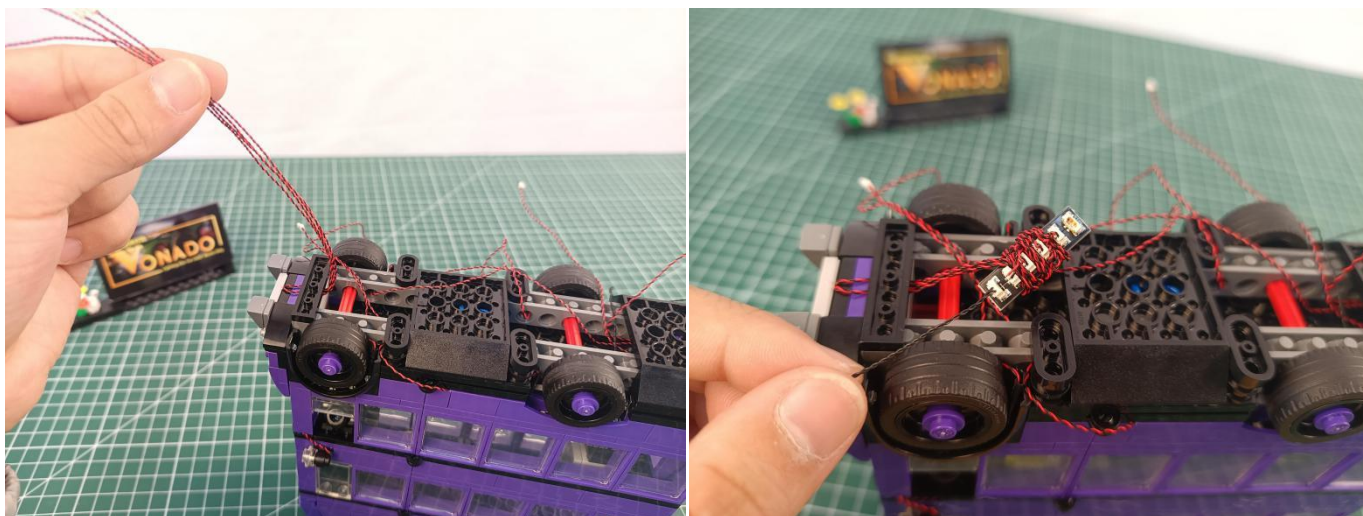
**79.**Reconnect the black piece.



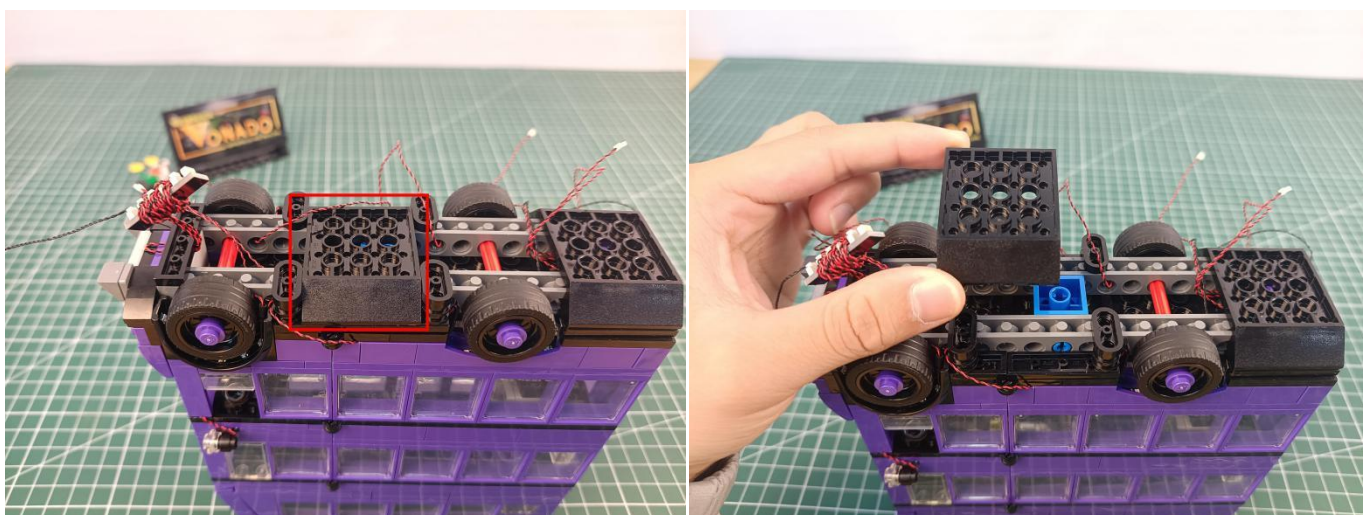
**80.**Take a 5cm connecting cable, a 6-port expansion board, assemble the as per below.



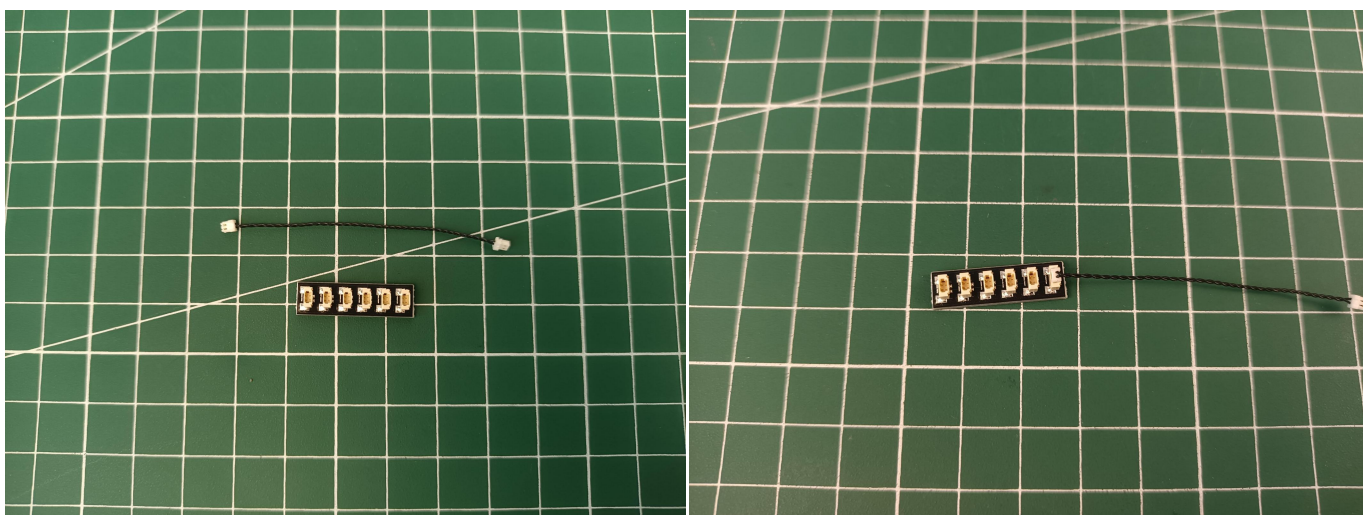
**81.** Connect the 4 cables from the head to the expansion board, and tuck excess cables around the expansion board.



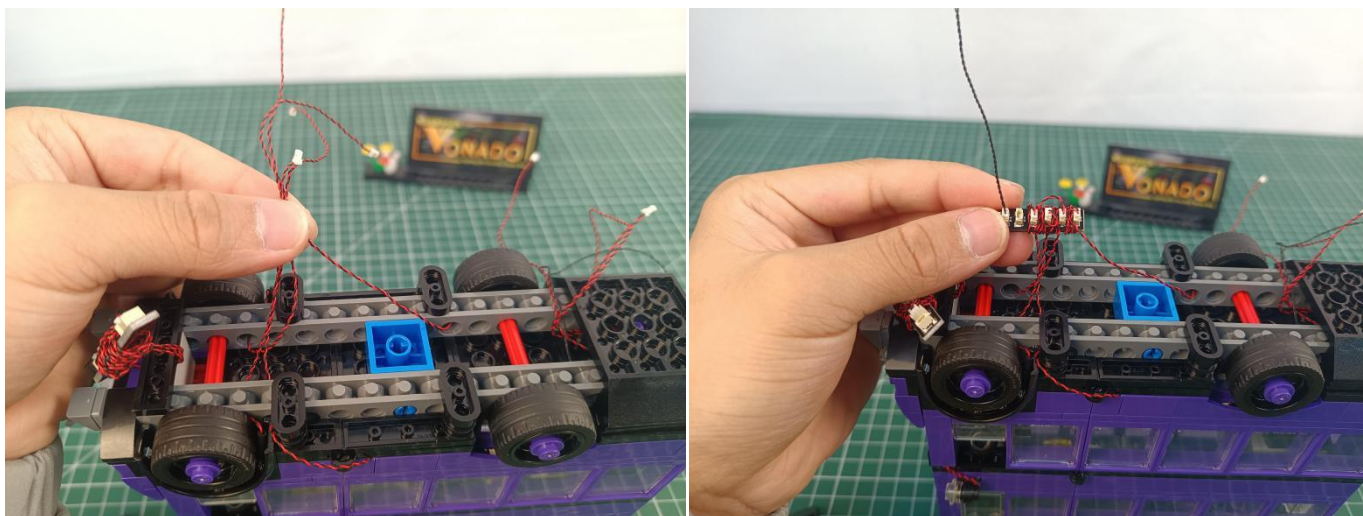
**82.** Remove the following black piece.



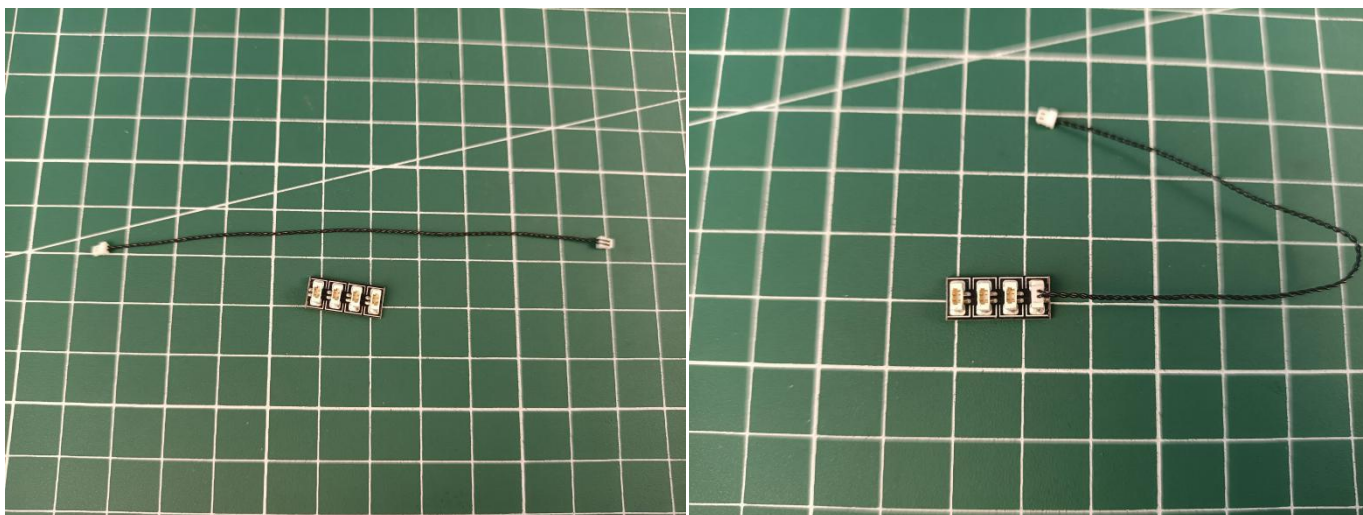
**83.** Take a 5cm connecting cable, a 6-port expansion board, assemble the as per below.



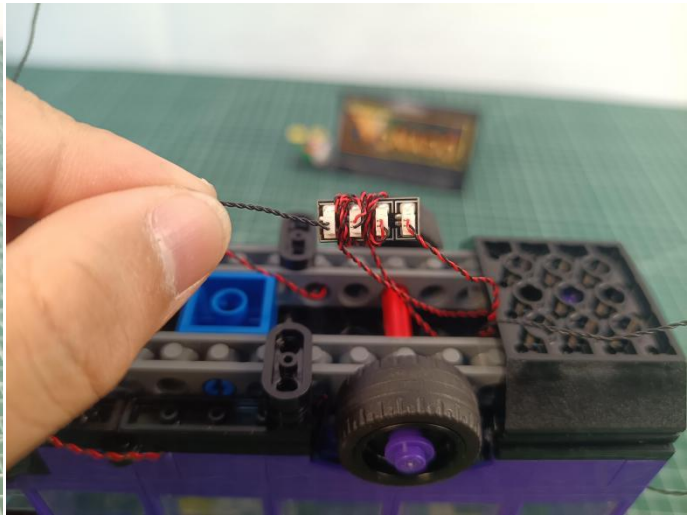
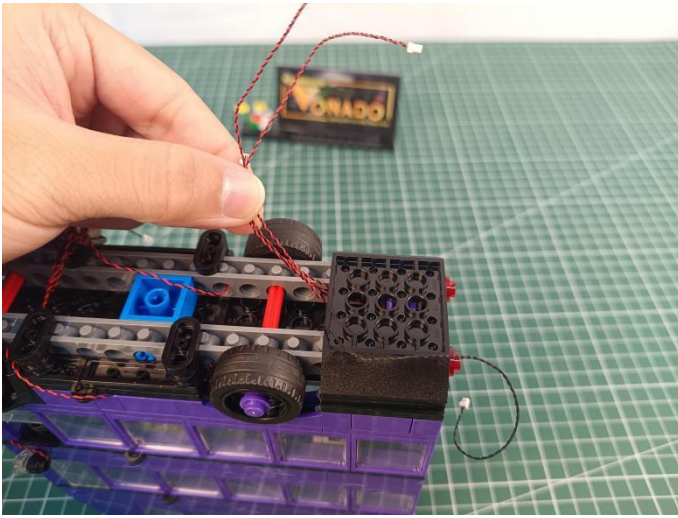
**84.** Connect the 4 cables of the strip lights to the expansion board, and tuck excess cables around the expansion board.



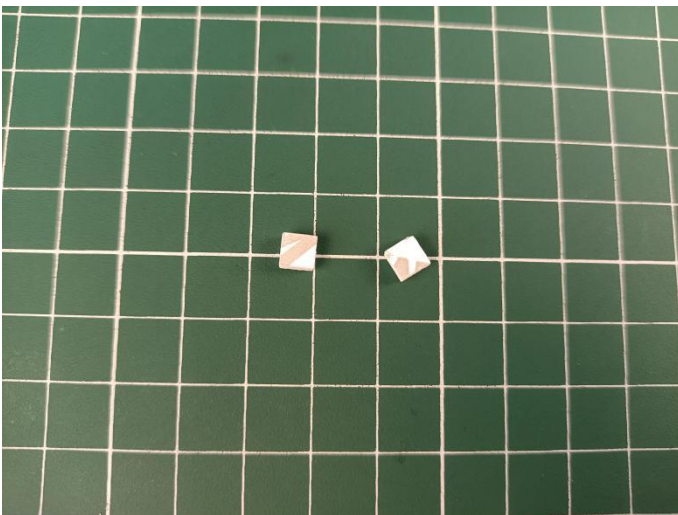
**85.** Take a 10cm connecting cable, a 4-port expansion board, assemble the as per below.



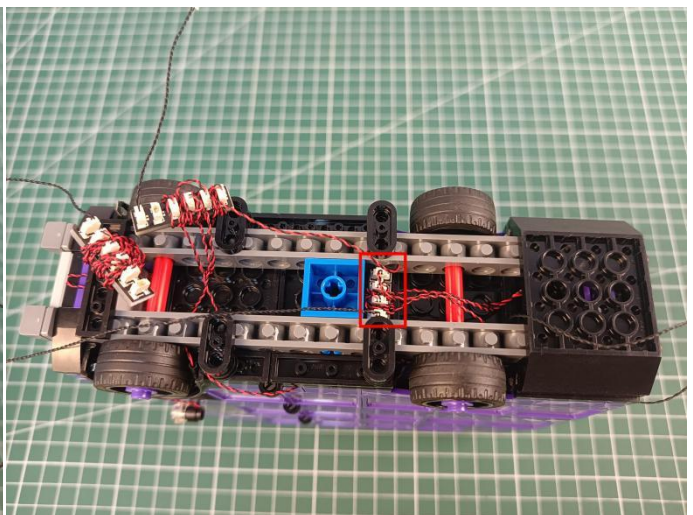
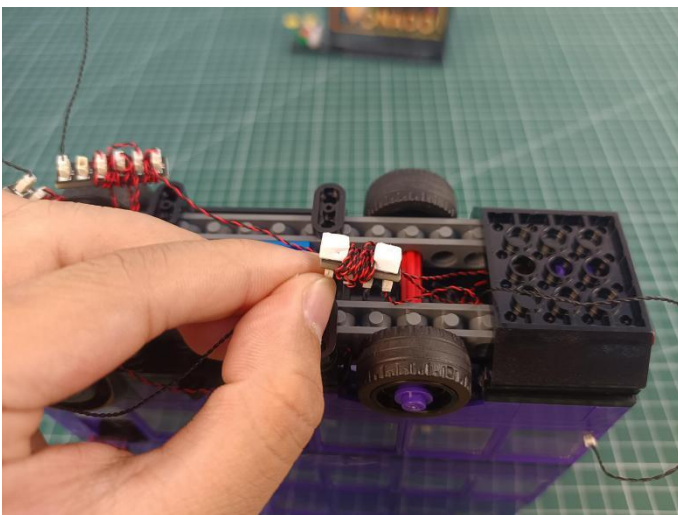
**86.** Connect the 3 cables from the tail to the expansion board, and tuck excess cables around the expansion board.



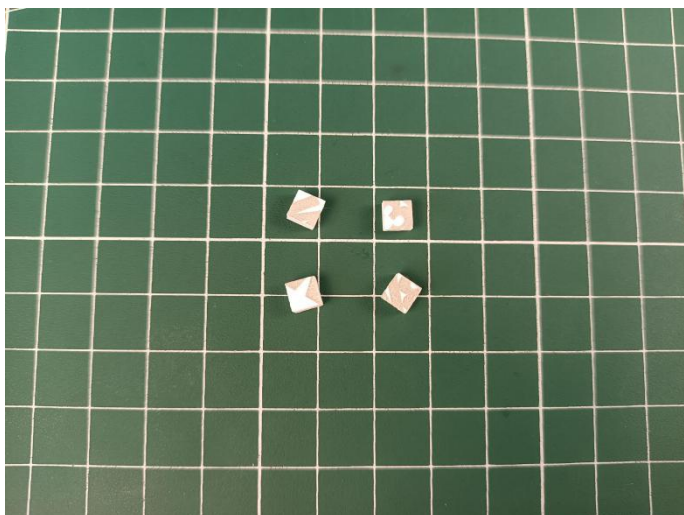
**87.** Take 2 adhesive squares.



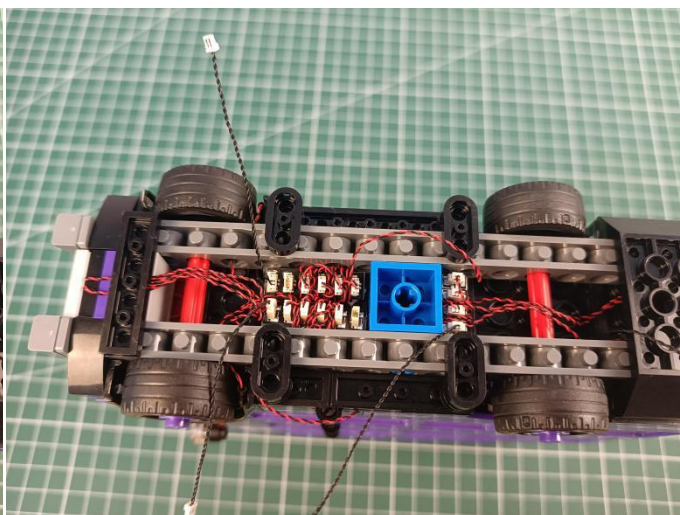
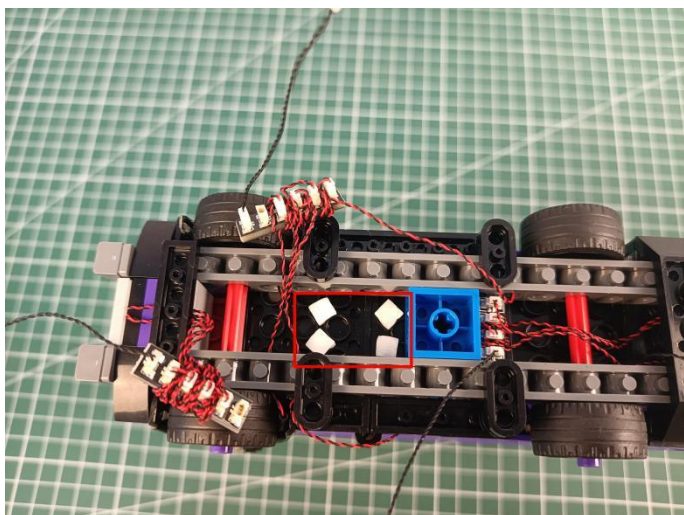
**88.** Stick them to the back of the expansion board, and stick the expansion board to the following place.



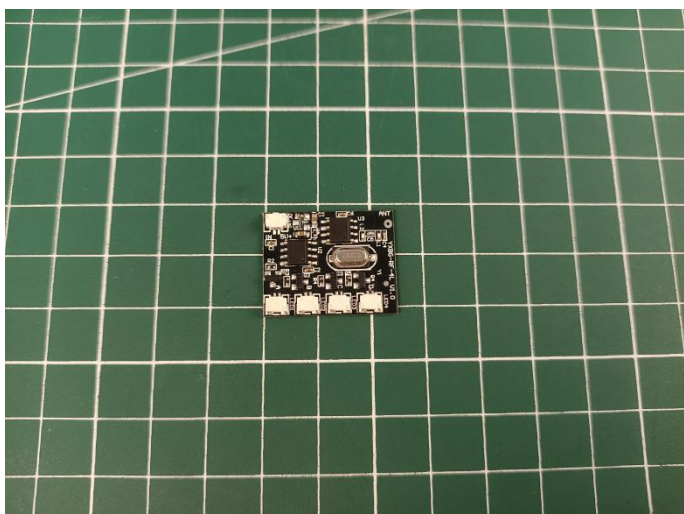
**89.**Take 4 adhesive squares.




**90.**Stick them to the following places, stick the expansion boards to them.



**91.**Take a Remote Control Switch Board.

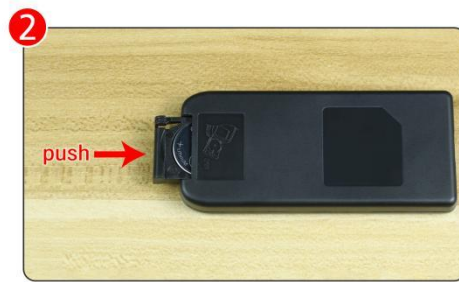


Remote control function description

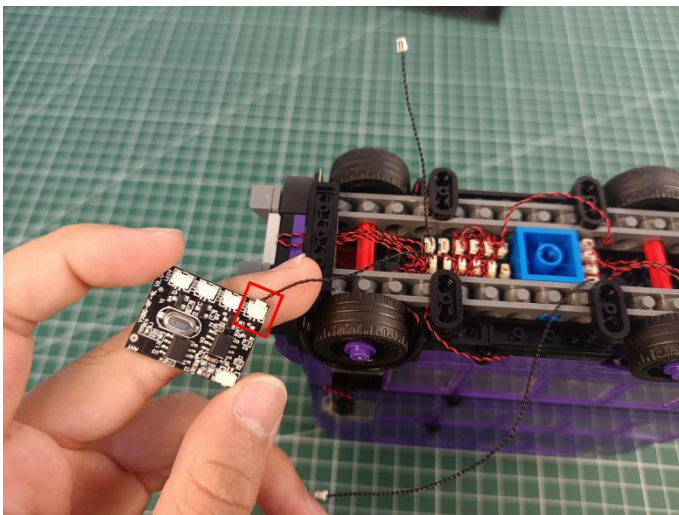


ON: All branches are opened  
OFF: all branches are closed  
A: open/close A road  
B: open/close B road  
C: open/close C road  
D: open/close D road  
FS: Turn on blinking for the last open channel  
BLN: Start breathing for the last opened path  
↑: Increase blinking/breathing rate  
↓: Decrease blinking/breathing rate  
Brightness+: Increase brightness  
Brightness -: Reduce brightness

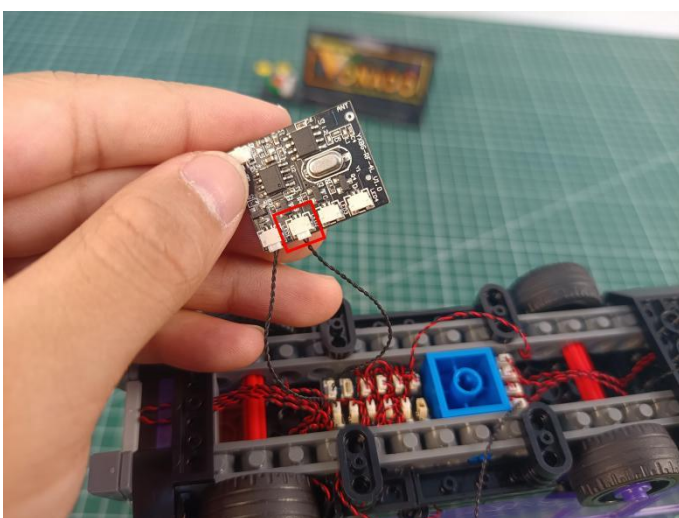
The remote control does not contain batteries, please buy a CR2025 or CR2032 button battery in the nearest store and install it in the remote control.



**92.** Connect the cable from the following expansion board to the A port.

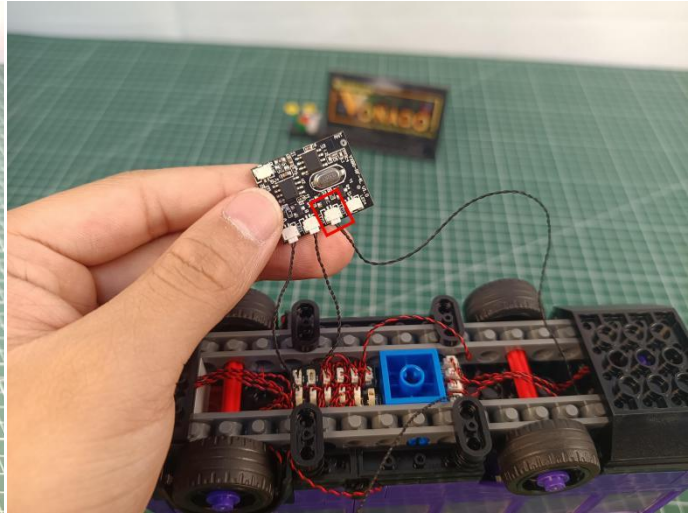
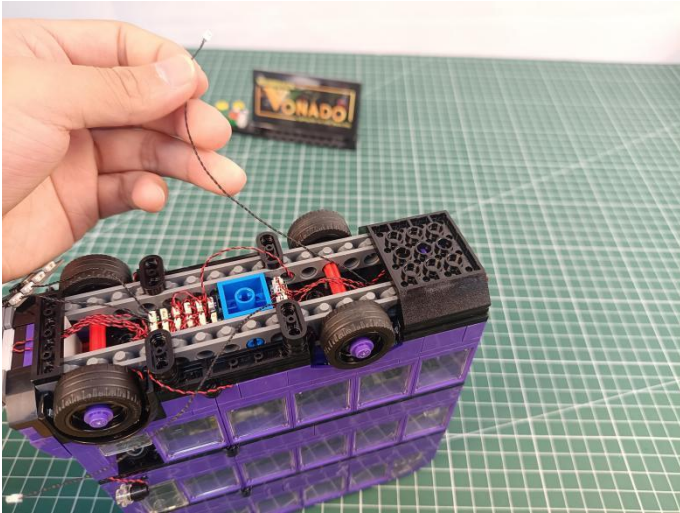


**93.** Connect the cable from the following expansion board to the B port.

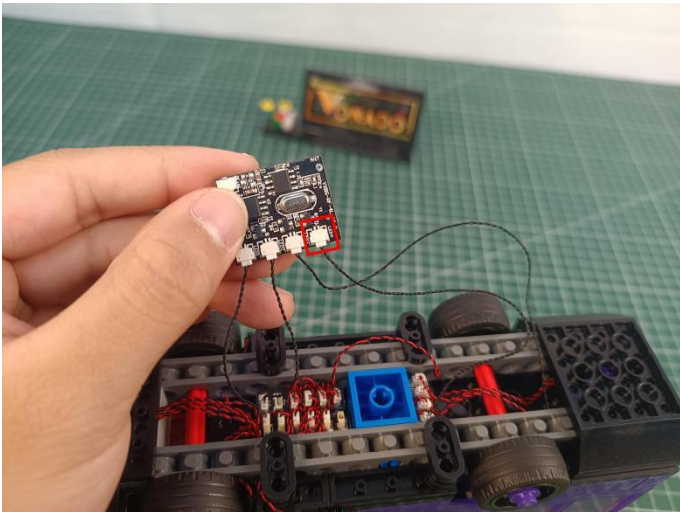




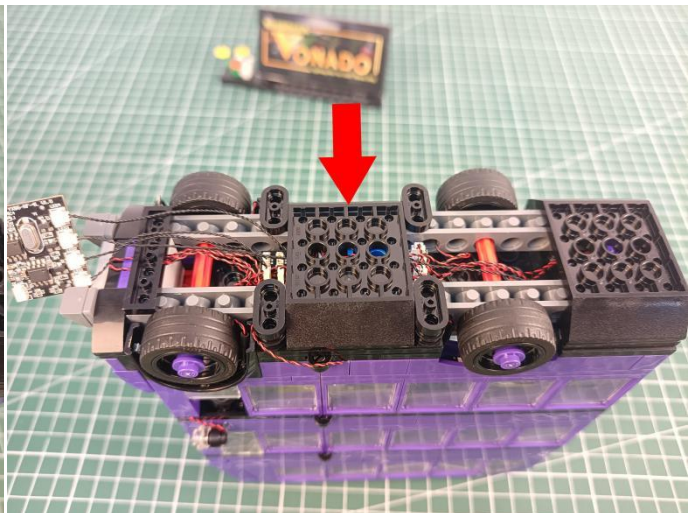
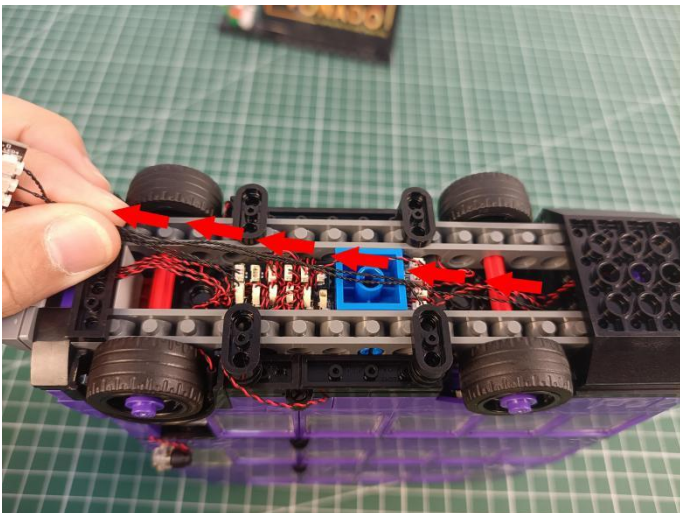
**94.** Connect the cable of the light inside to the C port.



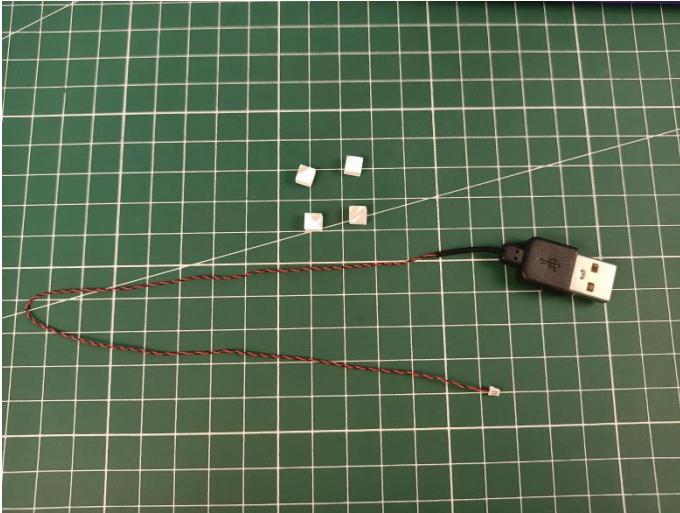
**95.** Connect the cable from the following expansion board to the D port.



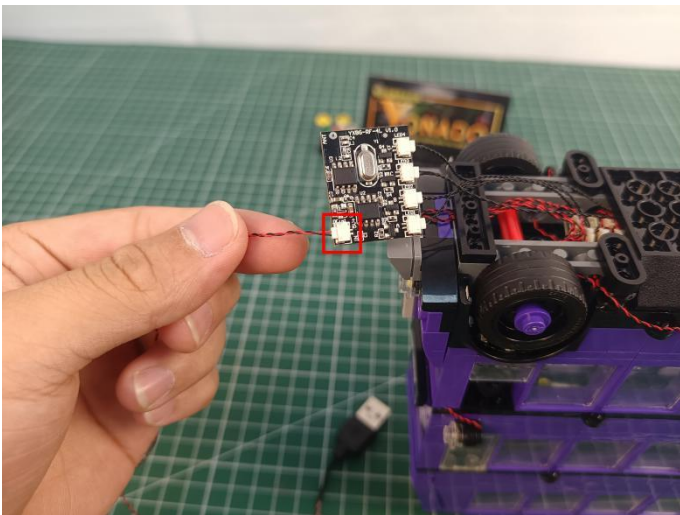
**96.** Place the cables as per below, reconnect the black piece.



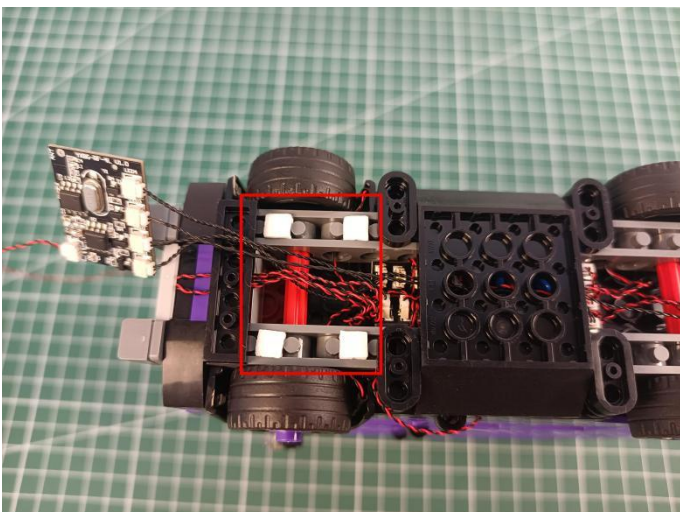
**97.**Take a USB cable, 4 adhesive squares.



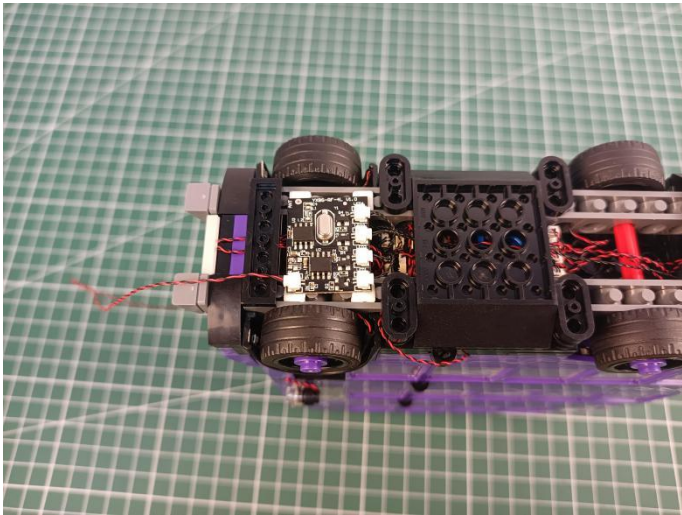
**98.**Connect the USB cable to the IN port.



**99.**Stick the adhesive squares to the following places, and stick the Remote Control Switch Board to them.



# 100



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

