# 75551 Brick-built Minions and their Lair P174

- **P174 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 "75551 P174".**

- **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.**
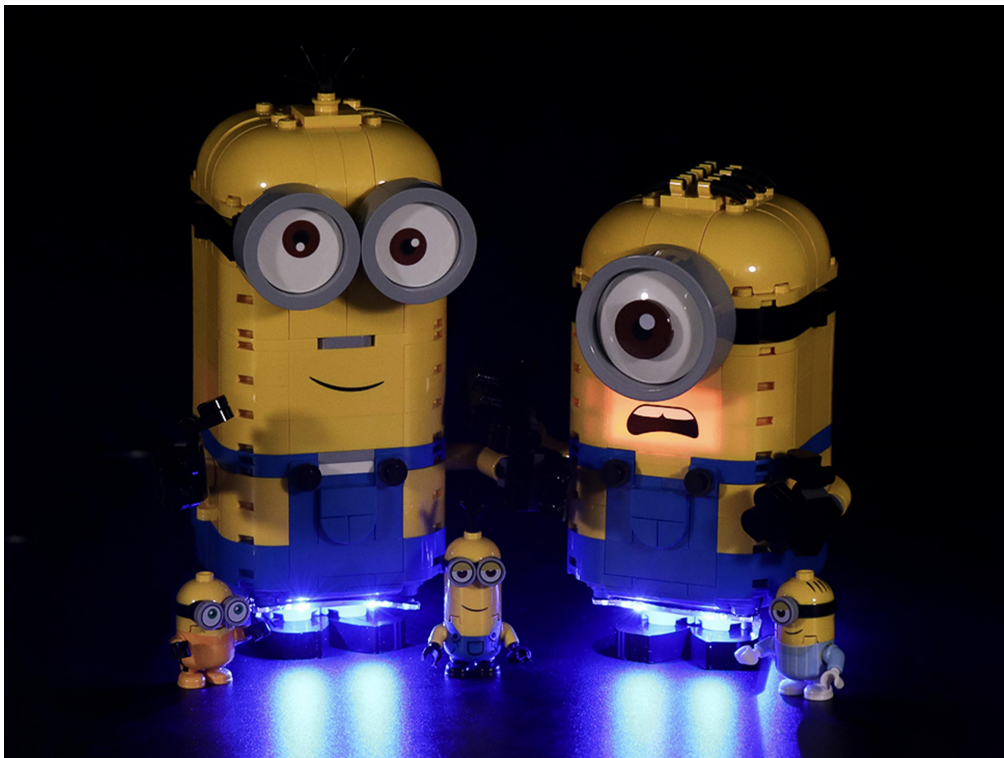
Strategies for the Installation

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	3
Bit Lights-30CM-Warm White	Bit Lights-30CM-Warm White	2
Bit Lights-15CM-Red	Bit Lights-15CM-Red	3
Headlights-15CM-Warm White	Headlights-15CM-Warm White	1
Connecting Cables-5CM	Connecting Cables-5CM	4
LED Strip Lights-Blue	LED Strip Lights-Blue	4
Expansion Board	6 Socket Expansion Board	2
USB Power Cable	USB Power Cable-30CM	2
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.
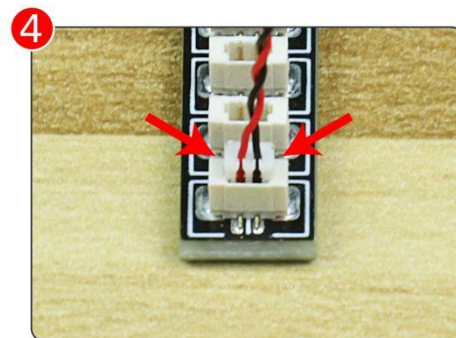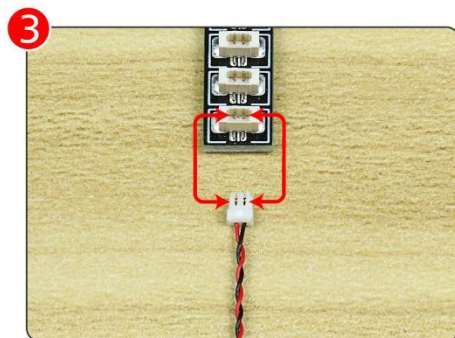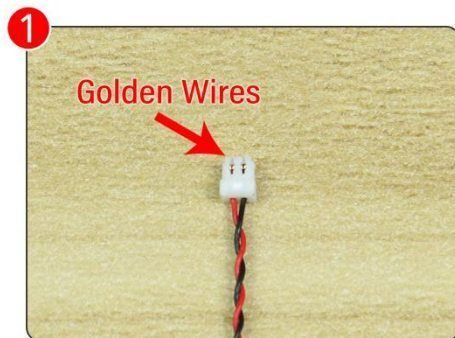
All our connections between plug and socket are all the same as shown above. So for any such structure with plug and socket, please pay attention to the golden wire of the plug and the golden needle of the socket, they must be touched together.

The connection method between the USB Power Cord and Expansion Boards is as follows:
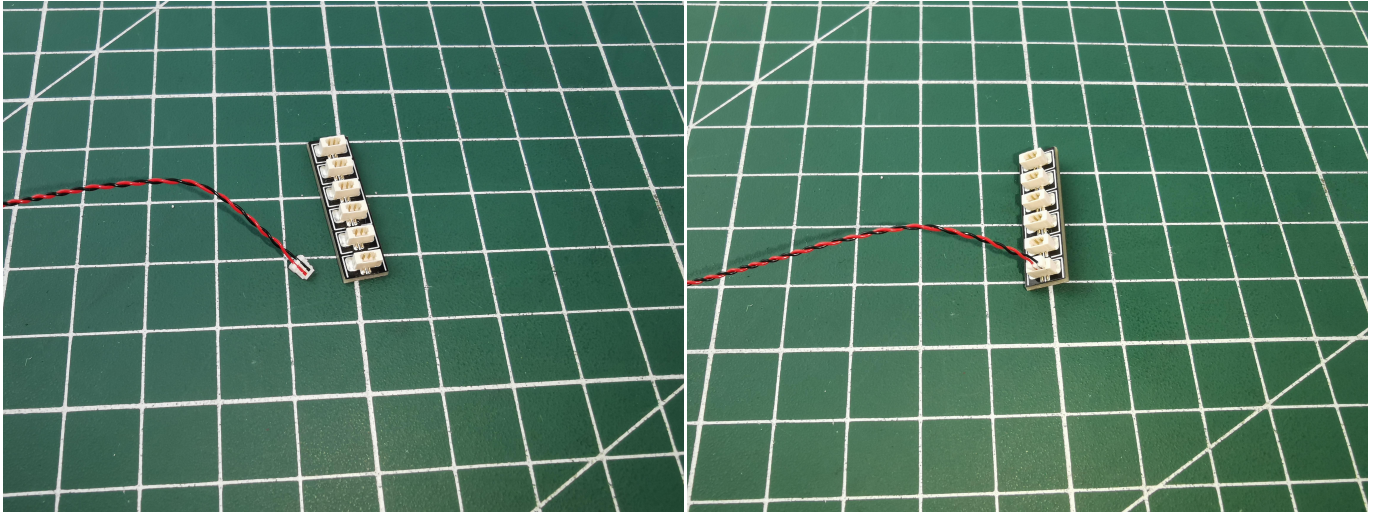
The USB Power Cord can be powered by phone chargers, power banks,etc.

USB connectors to connect devices

Power Bank

Phone Charger

USB Socket

USB Power Cable

With USB to interface
AA battery box

With USB to interface
AAA battery box

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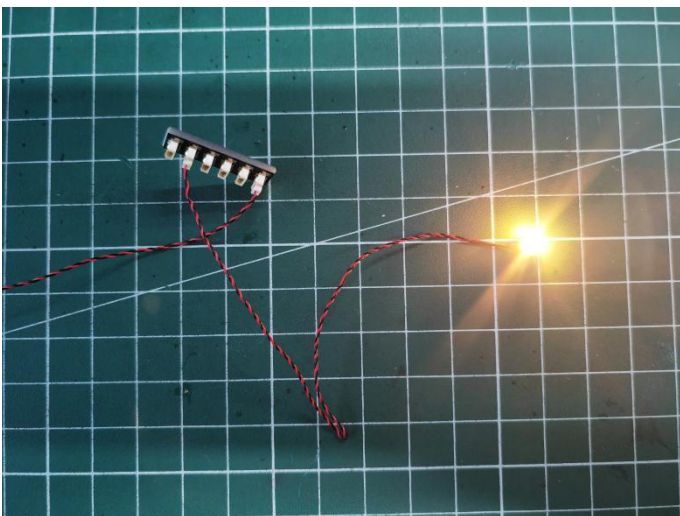
Test each lamp according to this method. It should be noted that after the test, the lamp must be returned to the corresponding bag to avoid confusion of types.

The components needs to be tested in this set is 2*Bit Lights-15CM-Warm White,2*Bit Lights-30CM-Warm White,3*Bit Lights-15CM-Red,1*Headlights-15CM-Warm White,4*LED Strip Lights-Blue.

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

Section C：laying out components following the instruction.

1

2.Take the minion with one eye.

3.Turn to the back, open it as per below.

4.Remove the eye.

5.Remove the following pole.
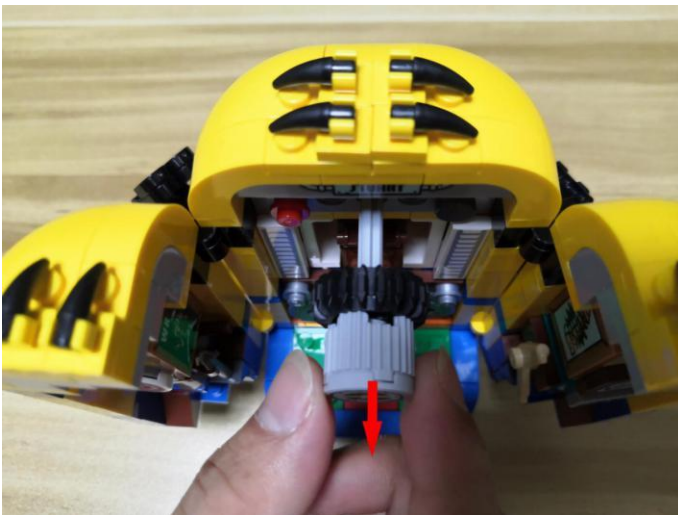
6.Take 2 warm white 15cm dot lights, 2 hollow orange round plates.

7.Thread the cable through the round plate as per below.
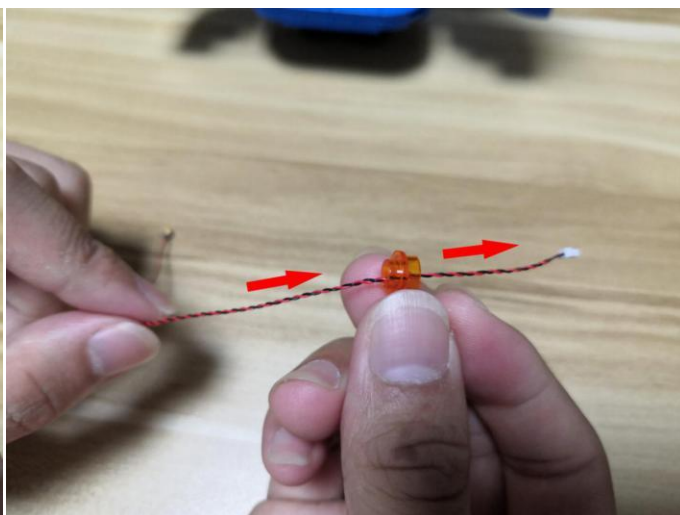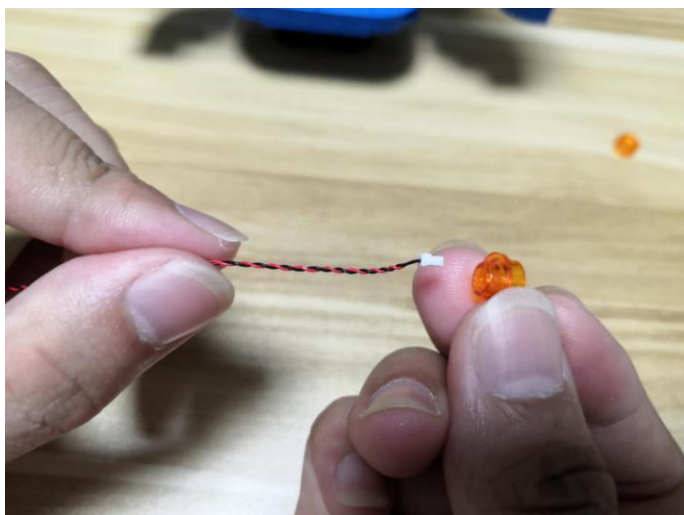
8.With lighting part facing down.
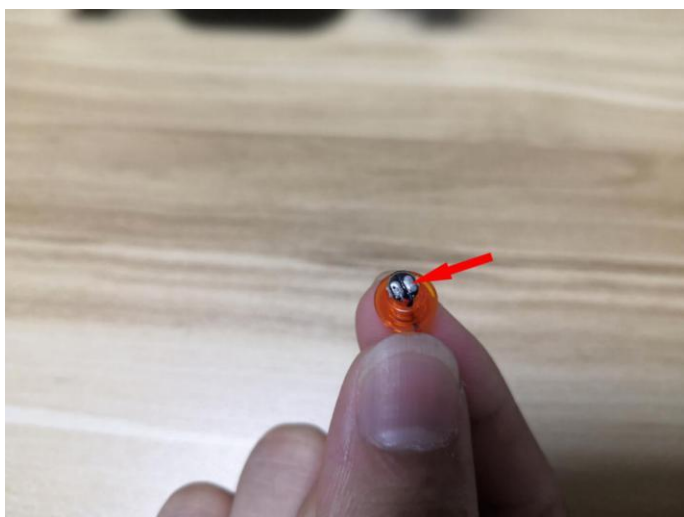
9.Connect the round plate at the following place.
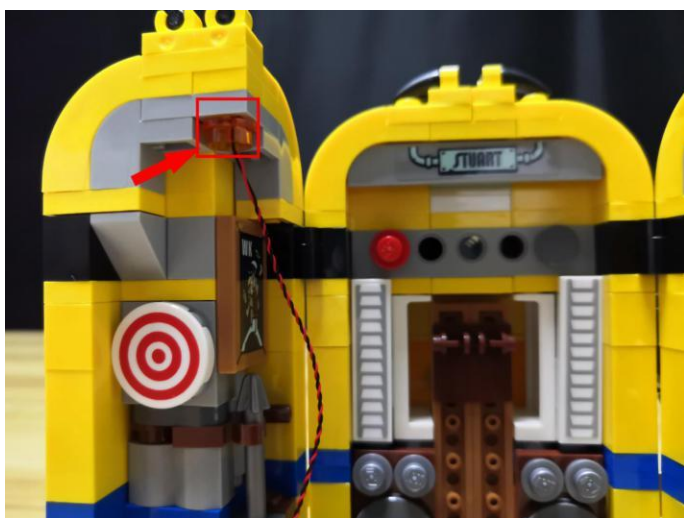
10.Install the light at the other side in the same way.
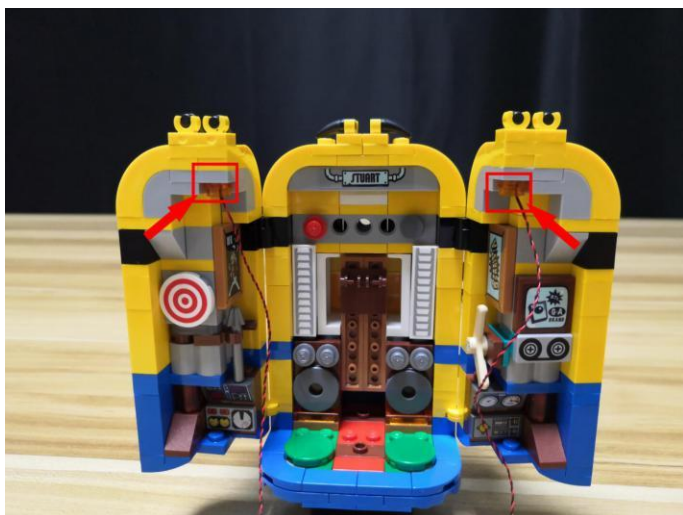
11.Disconnect the following piece with the tool.
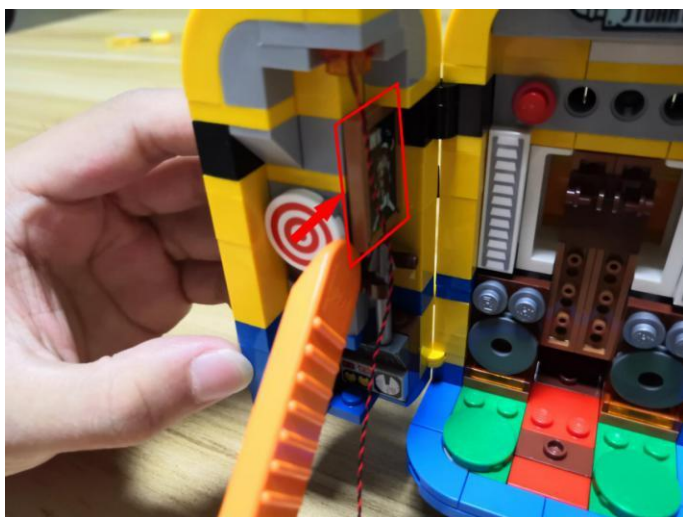
12.Place the cable as per below.

13.Reconnect the square piece.

14.Remove the following square piece from the right side.
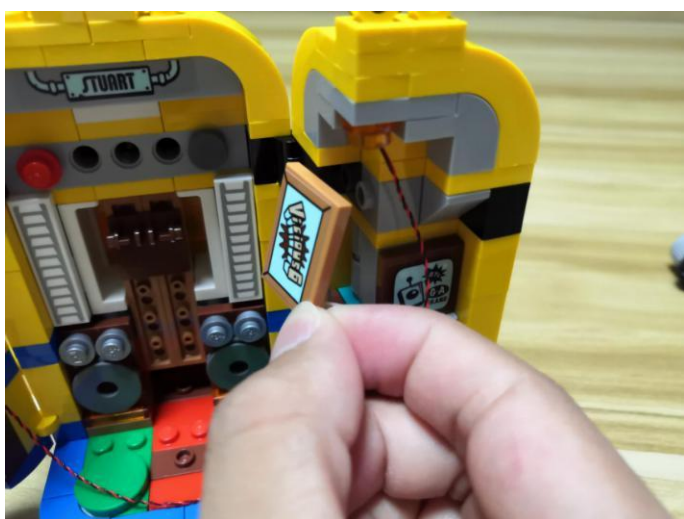
15.Continue to remove the following piece.
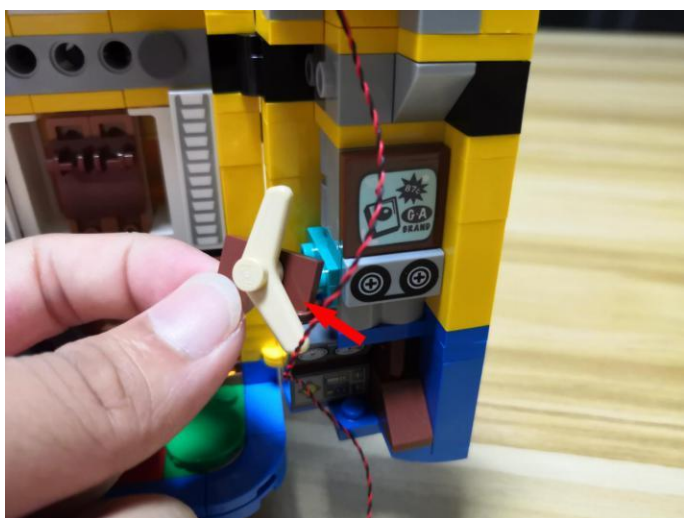
16.Place the cable as per below.
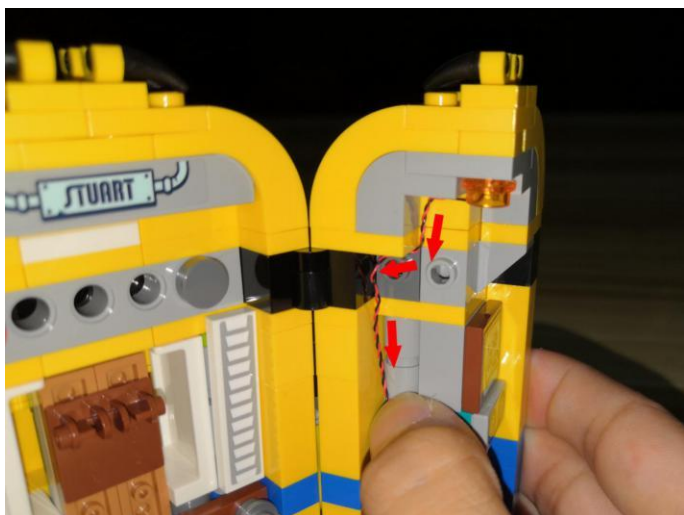
17.Reconnect the following pieces.
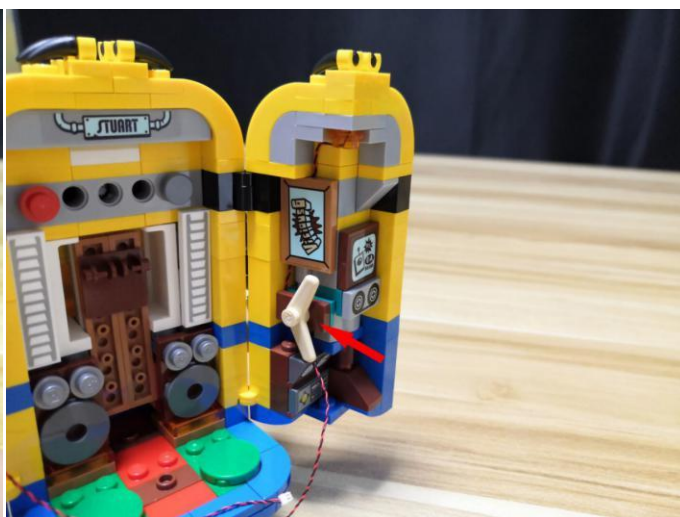
18.Disconnect the following pieces with the tool.
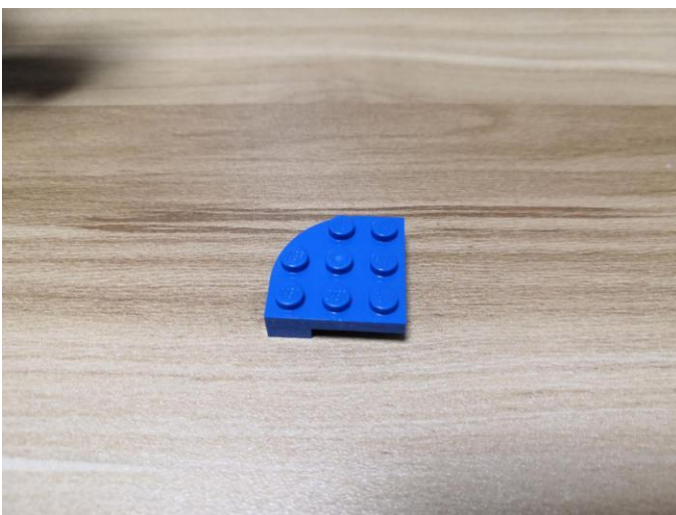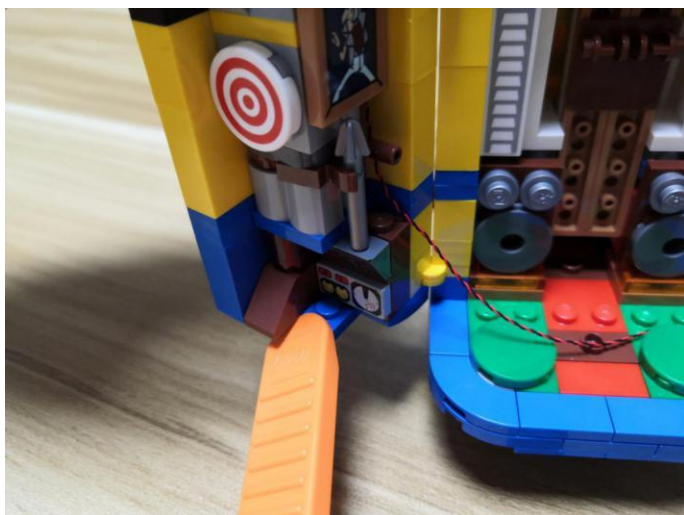
20.Pull the following brown piece out.
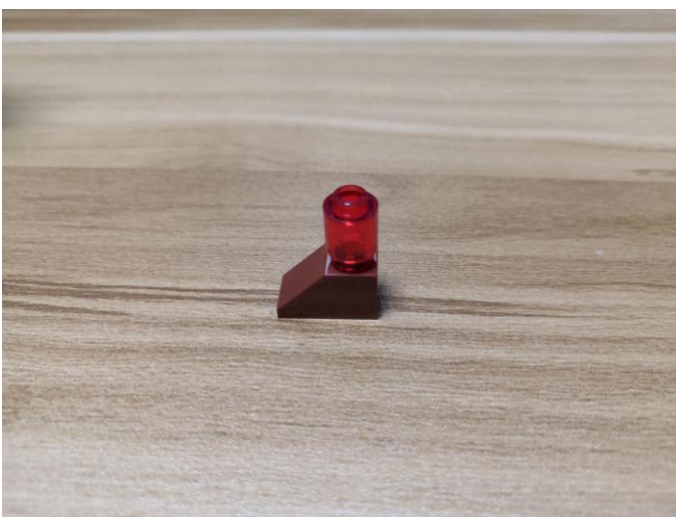
21.Remove the following piece.
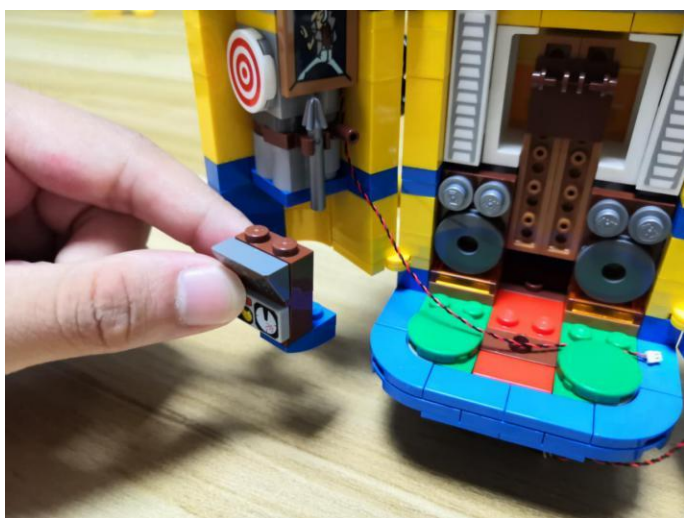
22.Remove the following pieces from the right side as well.
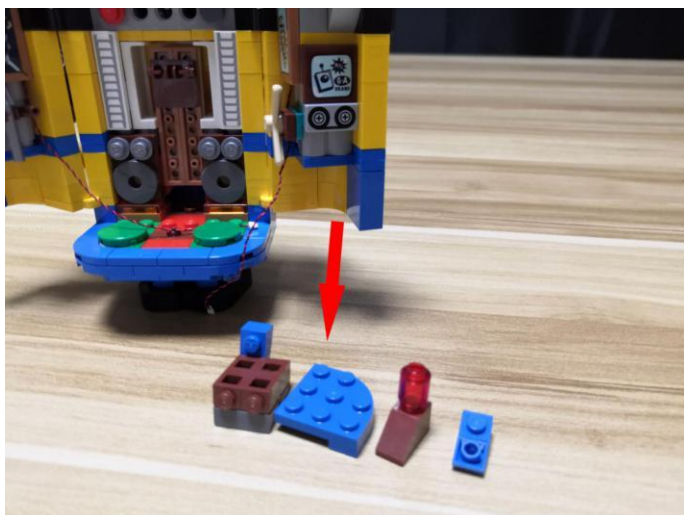
23.Take the 2 brown pieces.

24.Disassemble them as per below.

25.Take 2 red 15cm dot lights.

26.With lighting part facing up, place the light to the brown piece as per below.
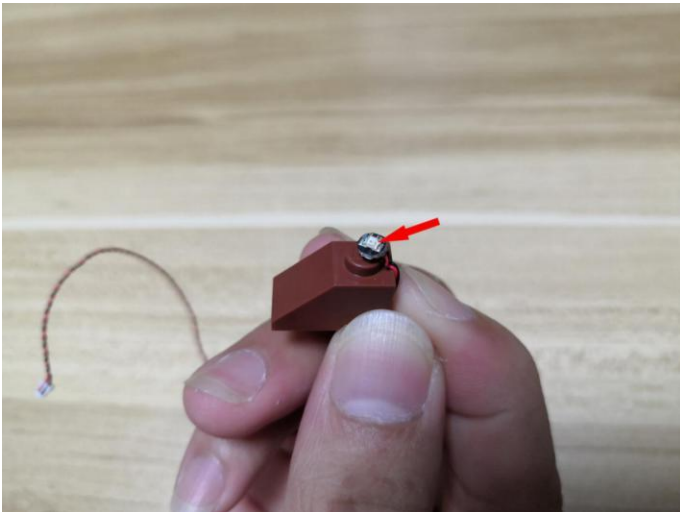
27.Reconnect the red piece to secure the light.
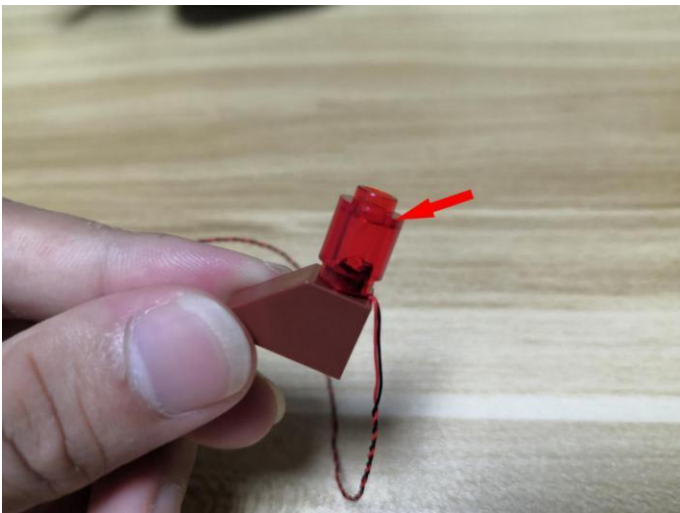
28.Install the light for the other piece in the same way.
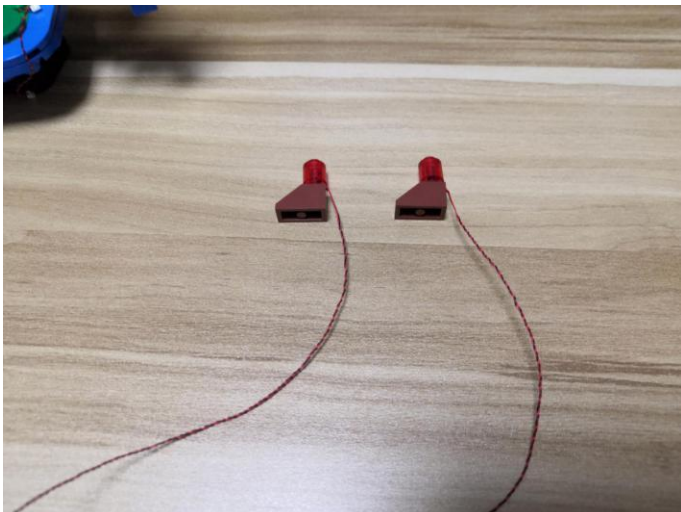
29.Reconnect the other pieces.

30
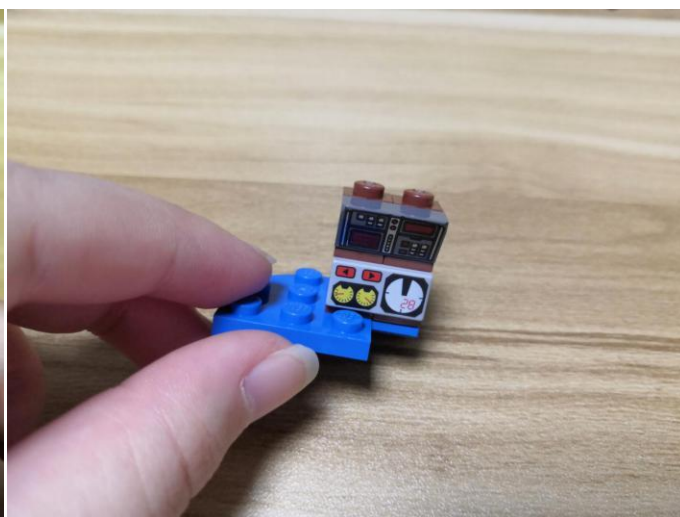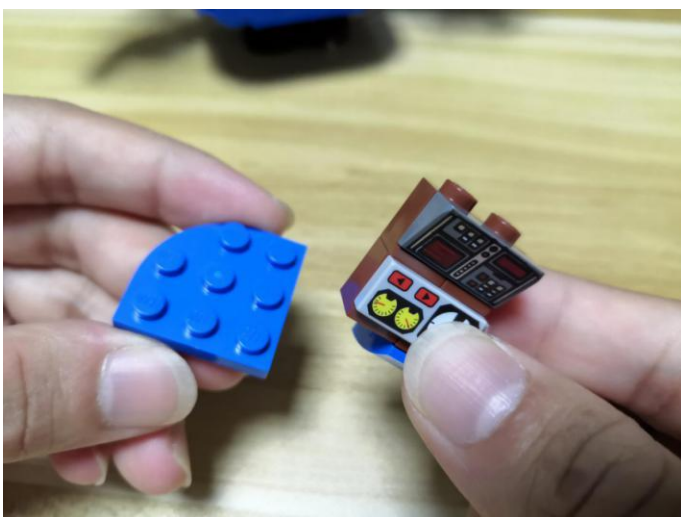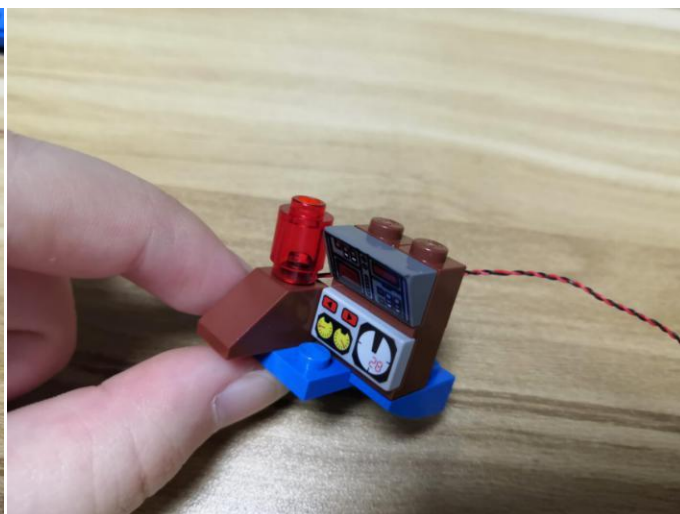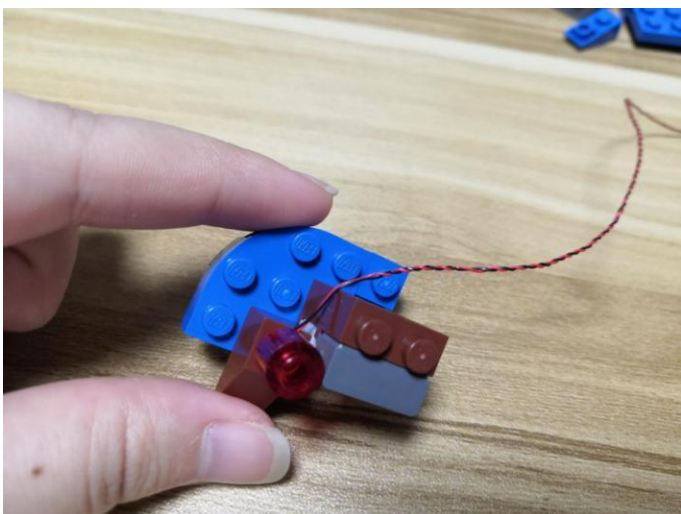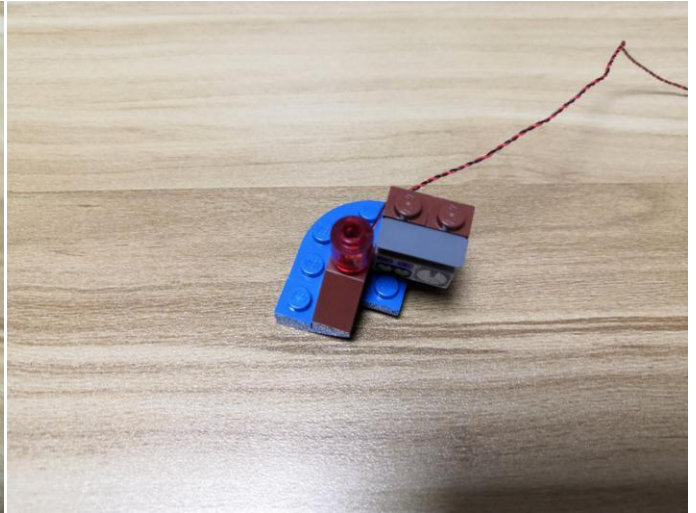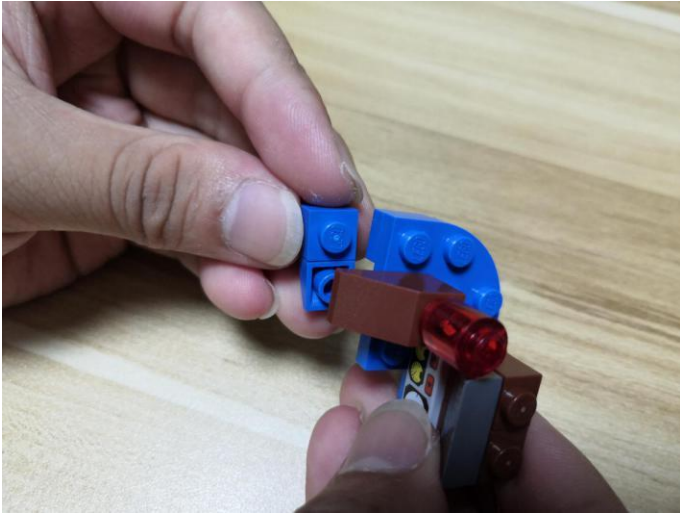
32.Reconnect this part.
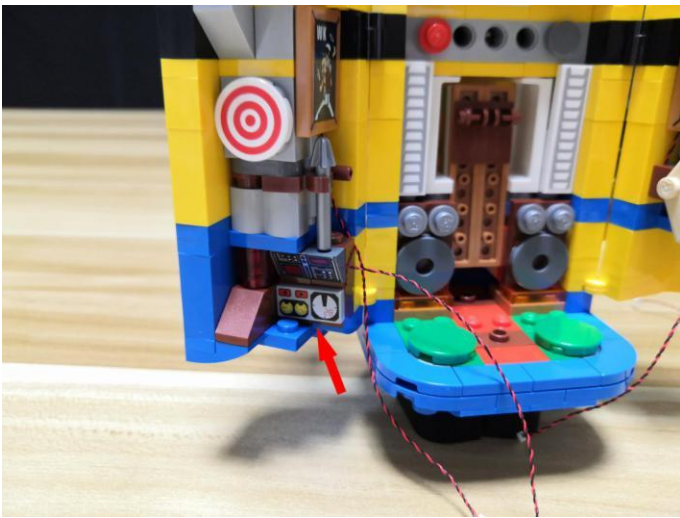
33.Tuck excess cable as per below.
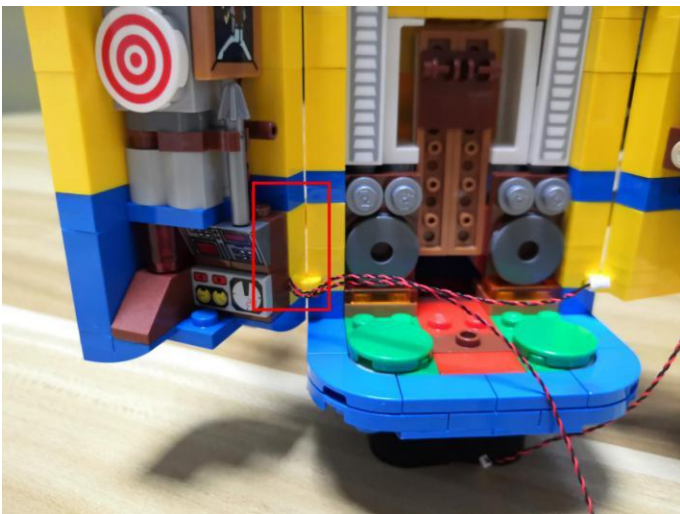
34.Reassemble the other piece.
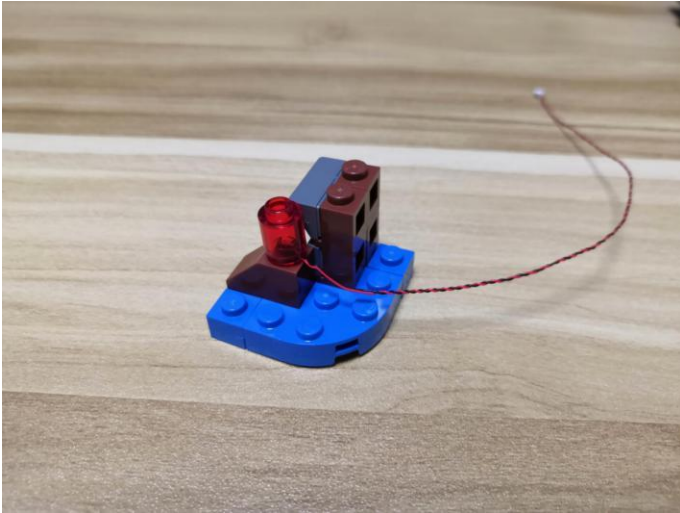
35.Reconnect this part to the right side underneath.
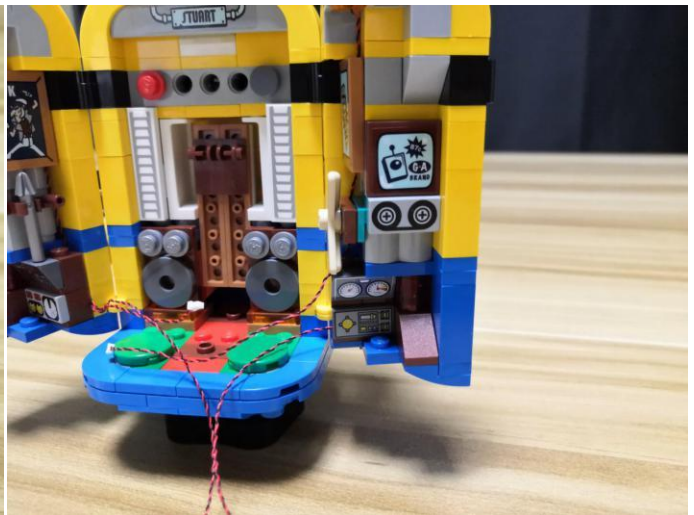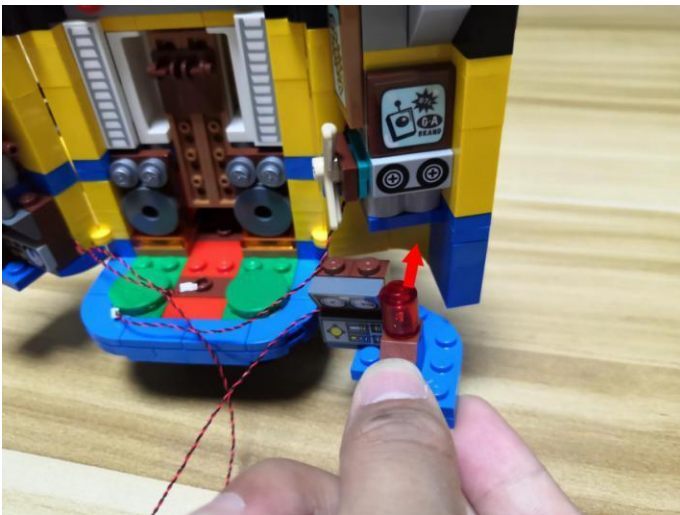
36.This completes installation of the lights for both sides.
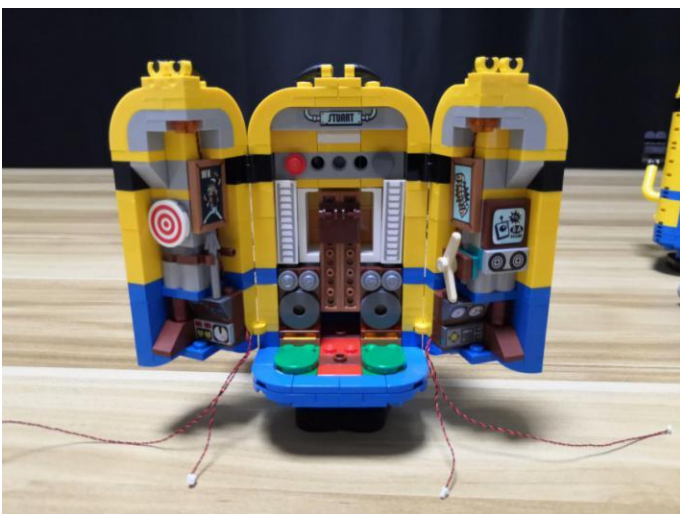
37.Put the following piece down.
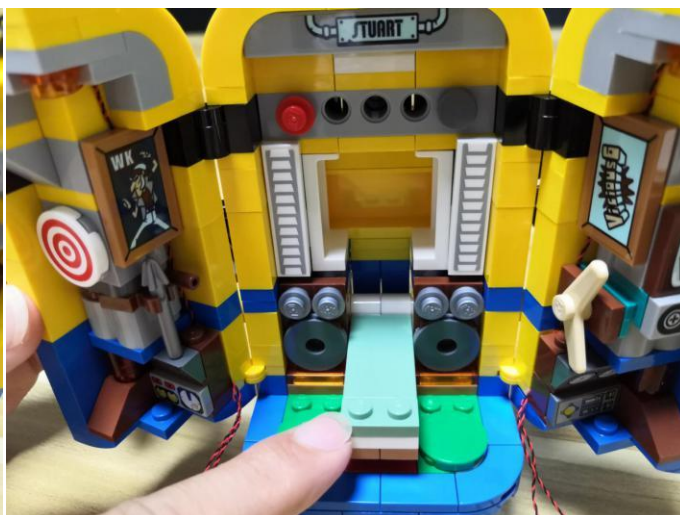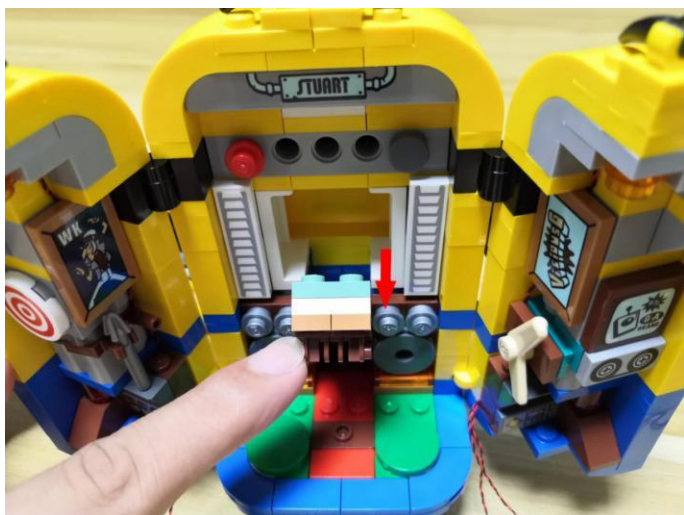
38.Remove the following piece.

39.Continue to remove the following piece.
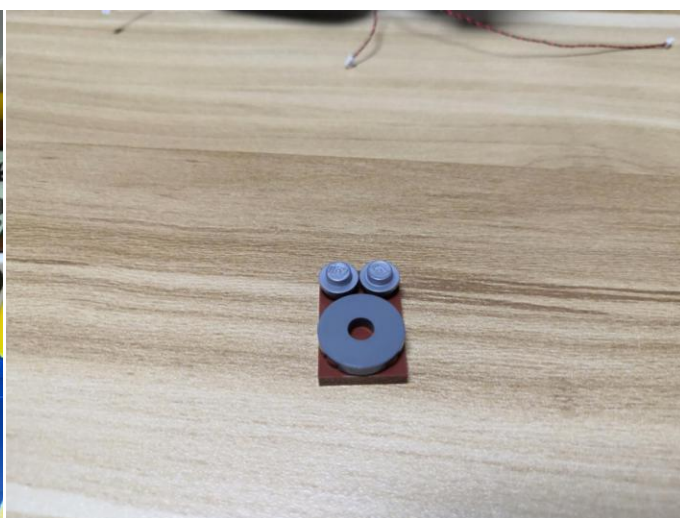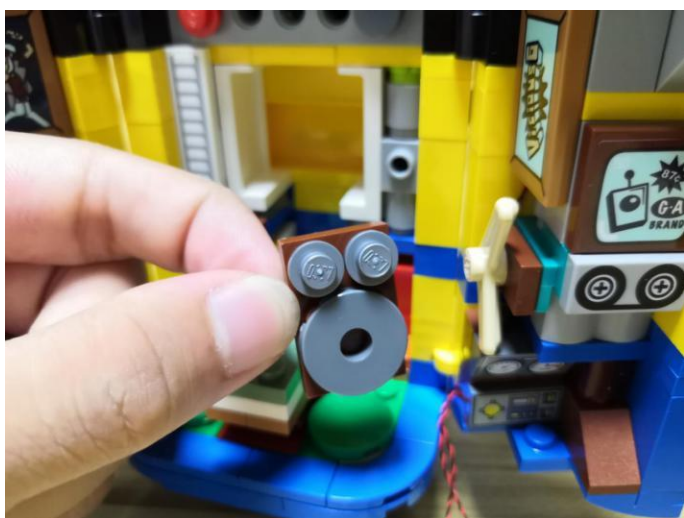
40.Take a 15cm head light, an adhesive square.
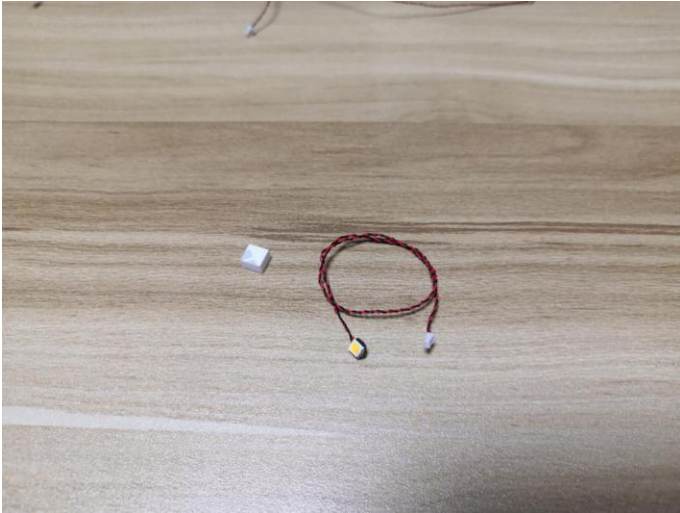
41.Stick the light to the adhesive square (with lighting part facing up).
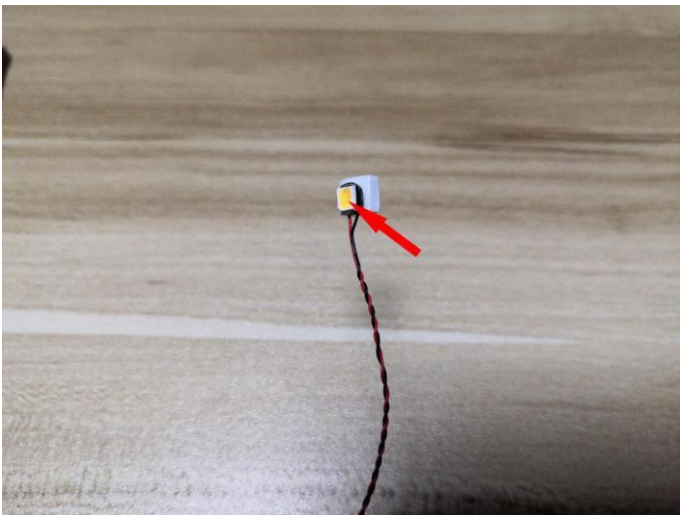
42.Bend the cable as per below.
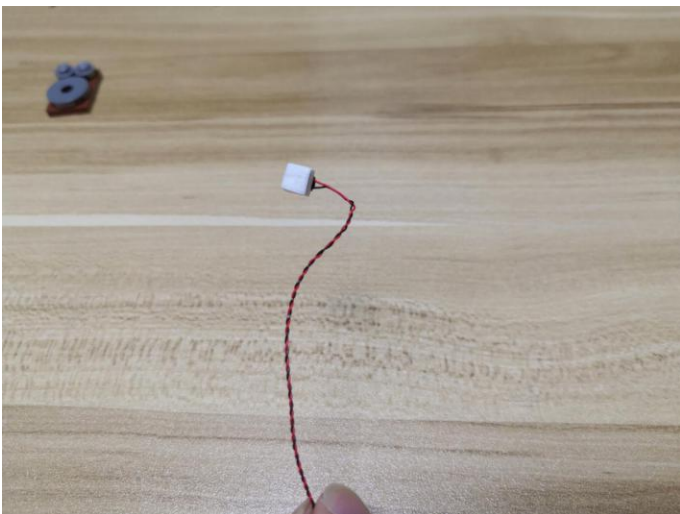
43.Stick the light to the following place.
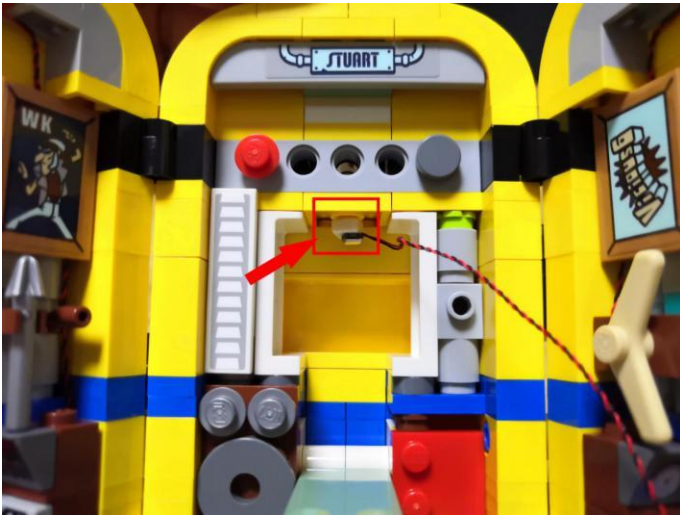
44.Create space at the following place with the tool.

45.Tuck excess cable inside.

46.Reconnect the following 2 pieces.

47.Remove the blue piece.
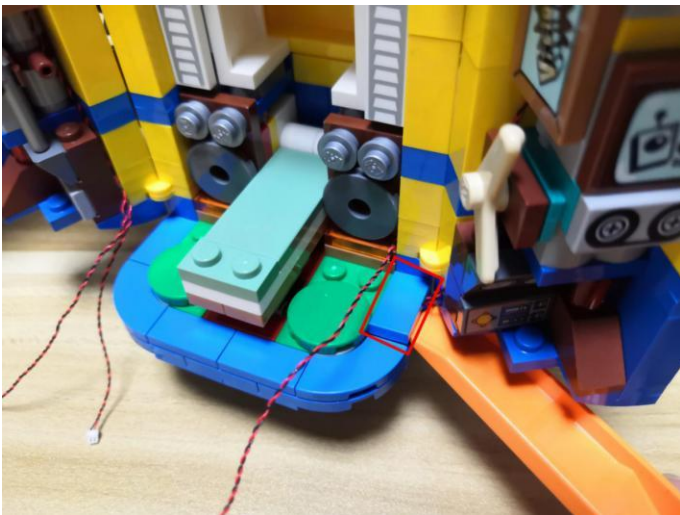
48.Tuck excess cables before reconnecting the rectangle piece.
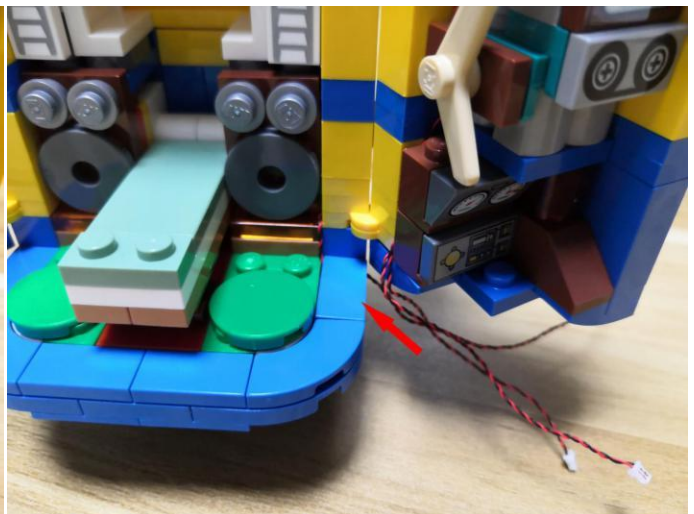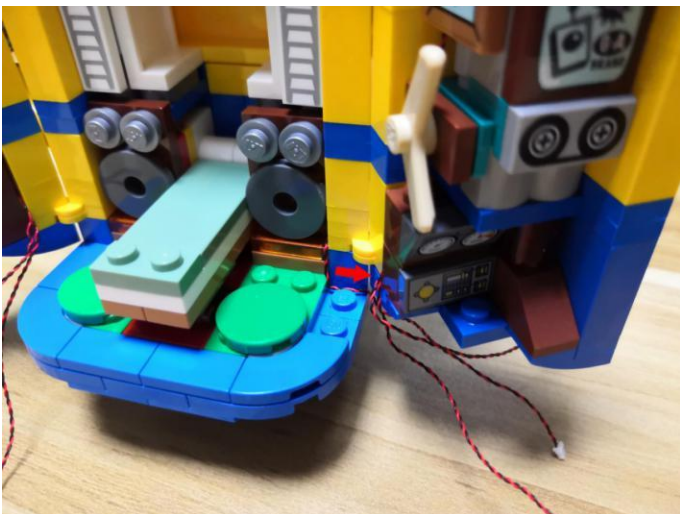
49.Put the following piece up, reconnect it.
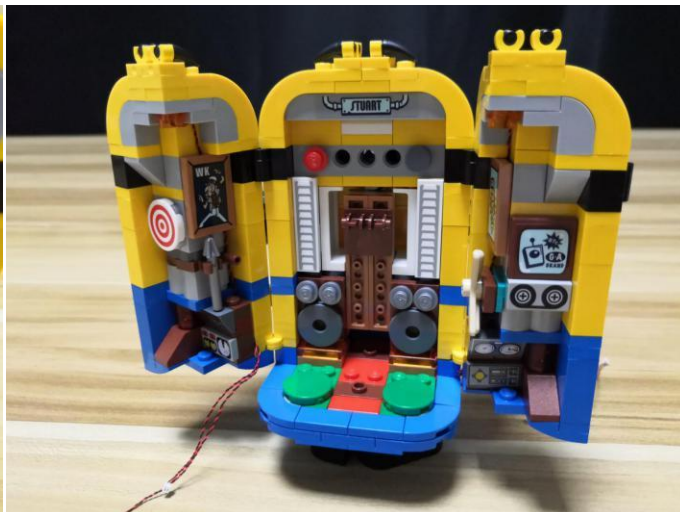
50.Close the back.
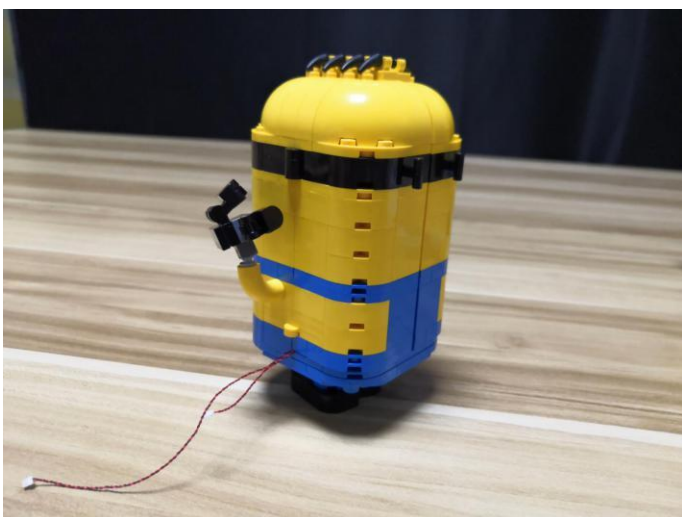
51.Turn the minion upside down.
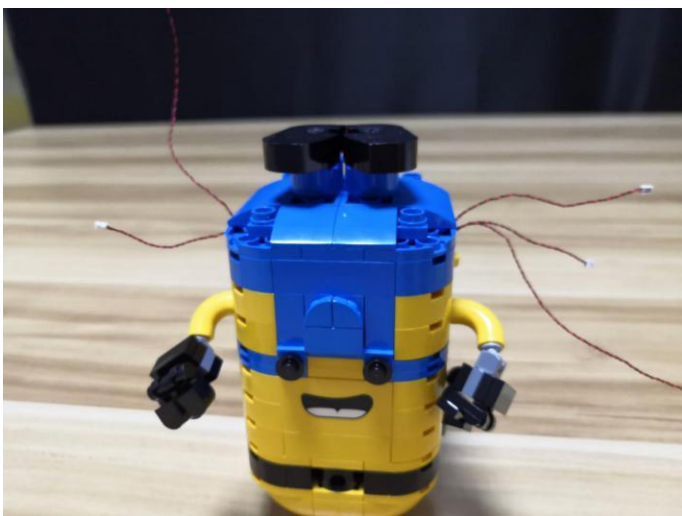
52.Disconnect the following pieces from the bottom.
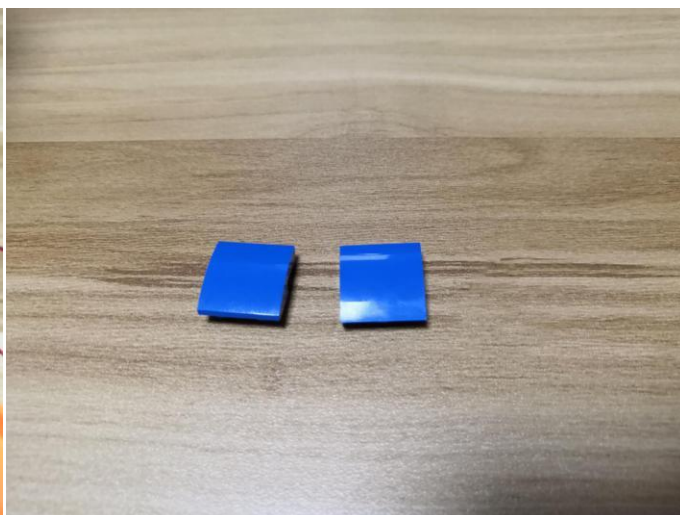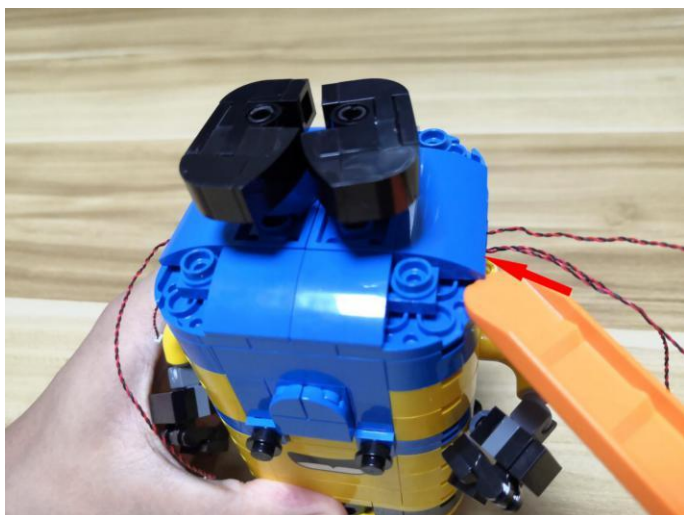
53.Continue to remove the green piece.
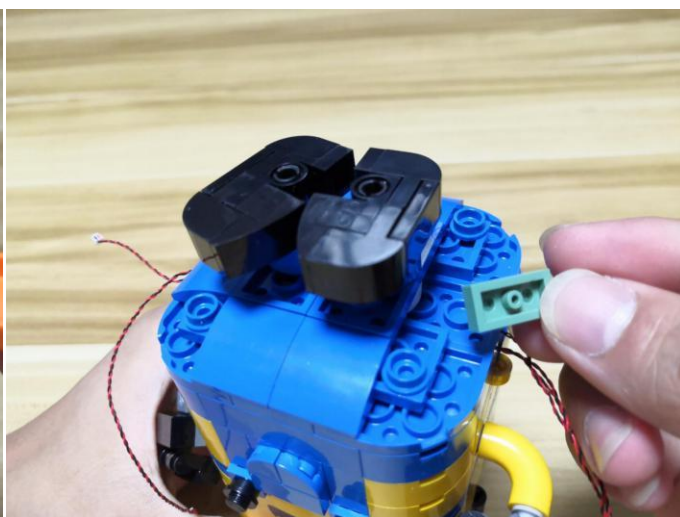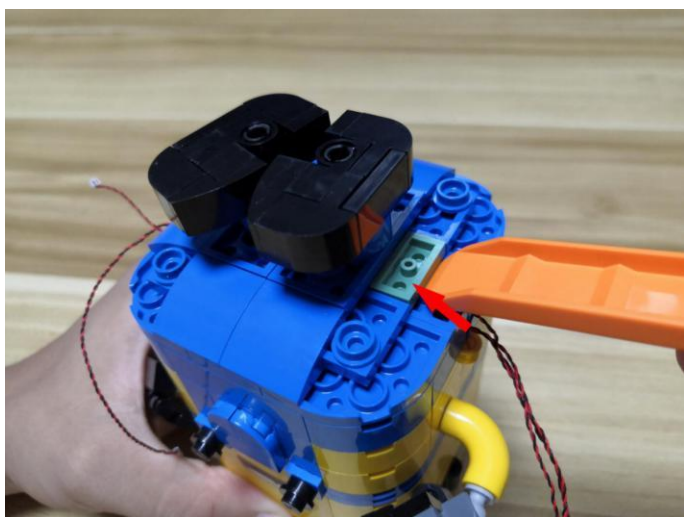
54.Remove the pieces from the other side as per below.
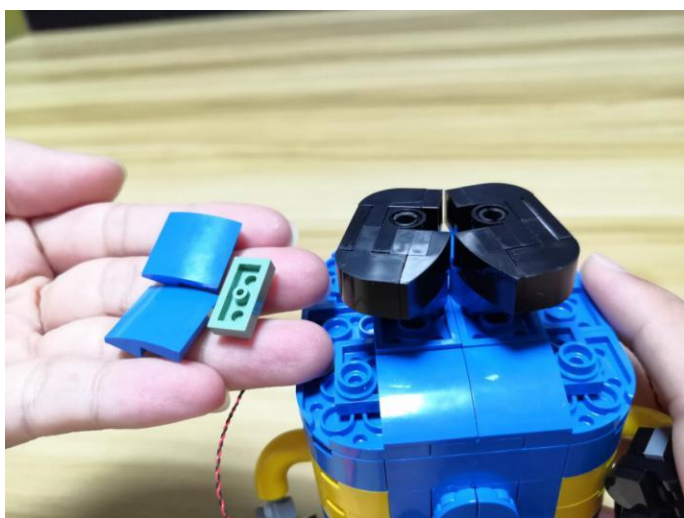
55.Pull right foot up.
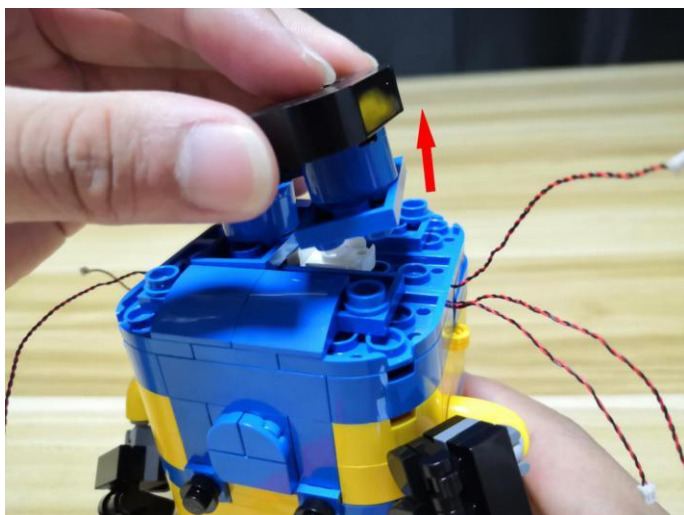
56.Take 2 longer cables.

57.Thread the cables through the hole on the blue piece as per below.
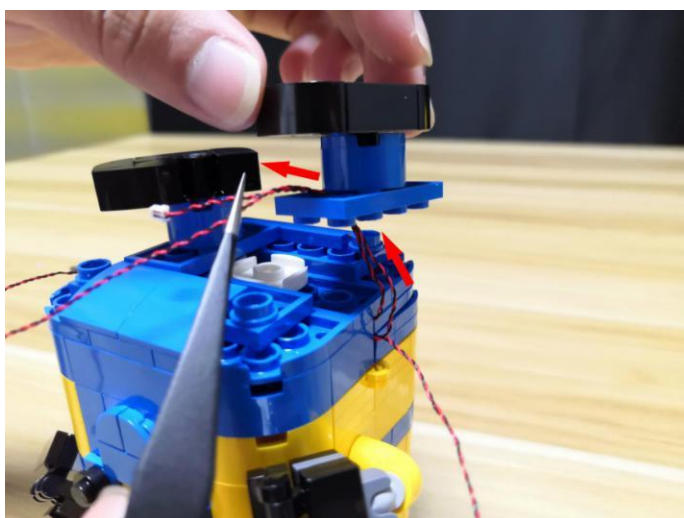
58.Reconnect the foot.
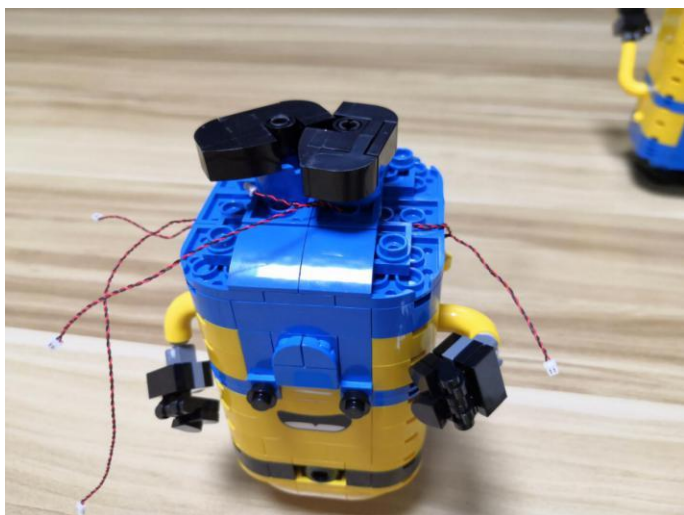
59.Reconnect the following pieces we removed before.
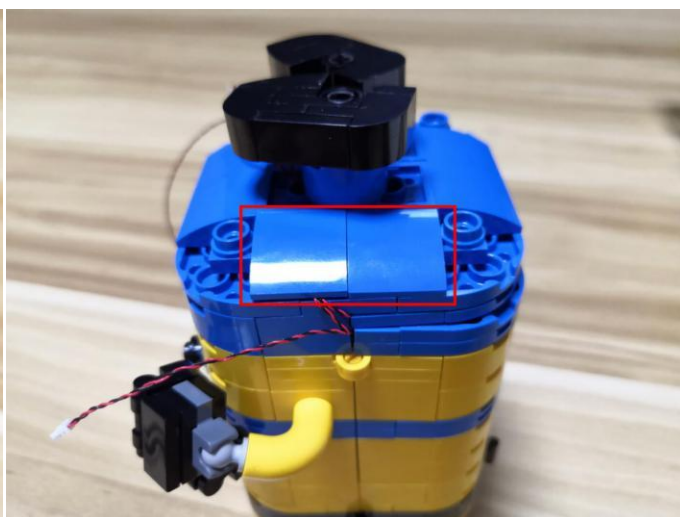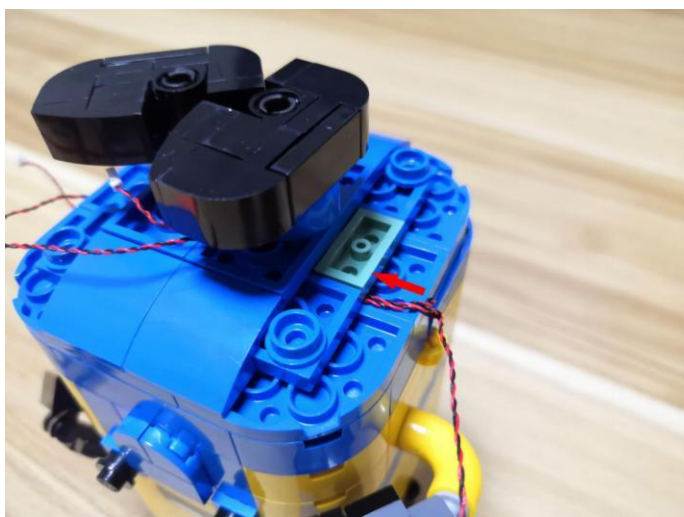
60.Turn to the left, pull the left foot up.
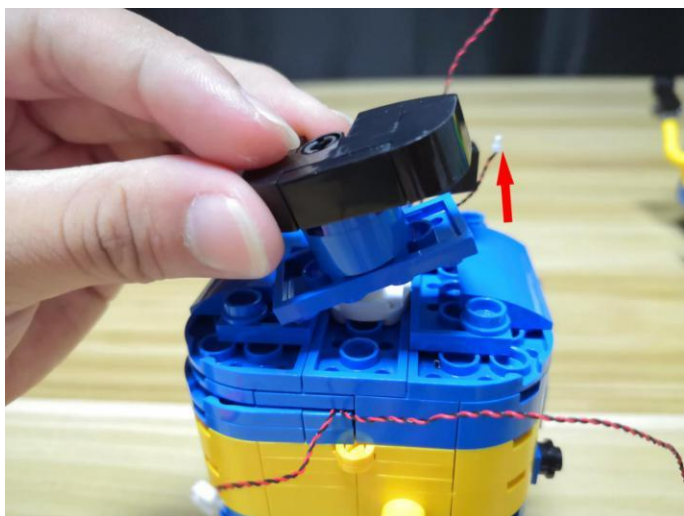
61.Take the following longer cable, thread it through the hole on the blue piece.
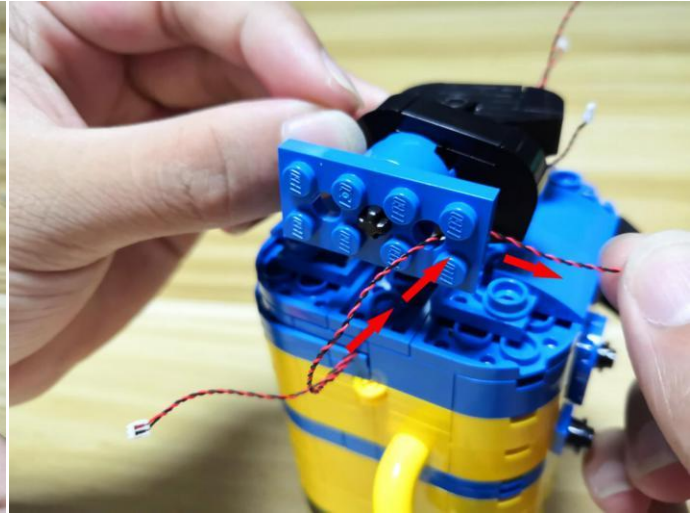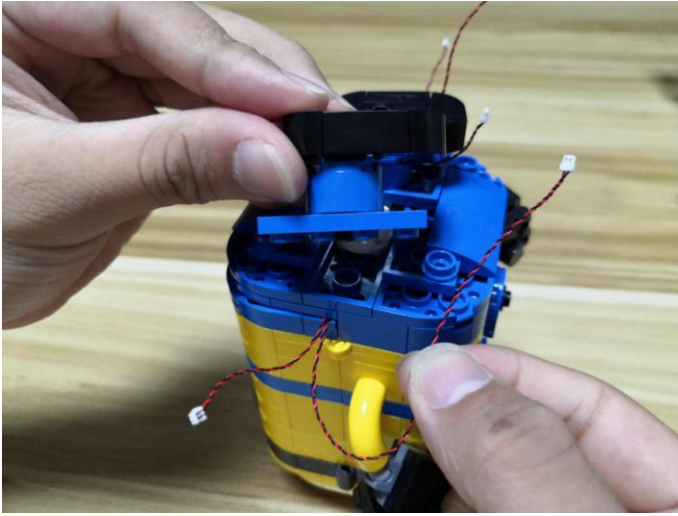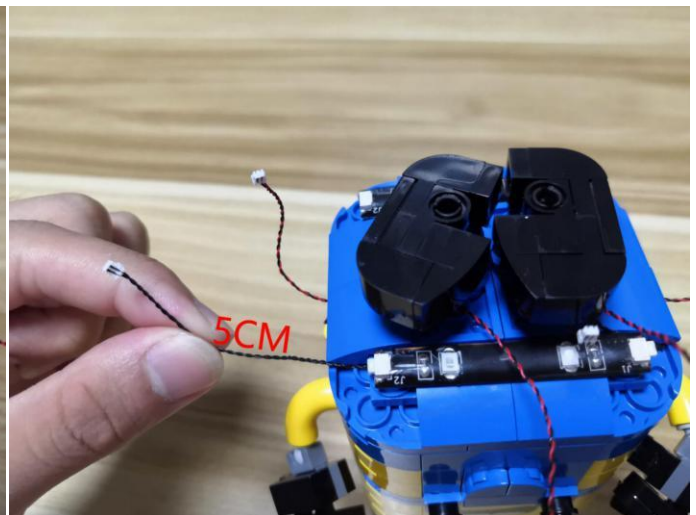

62.Reconnect the foot.
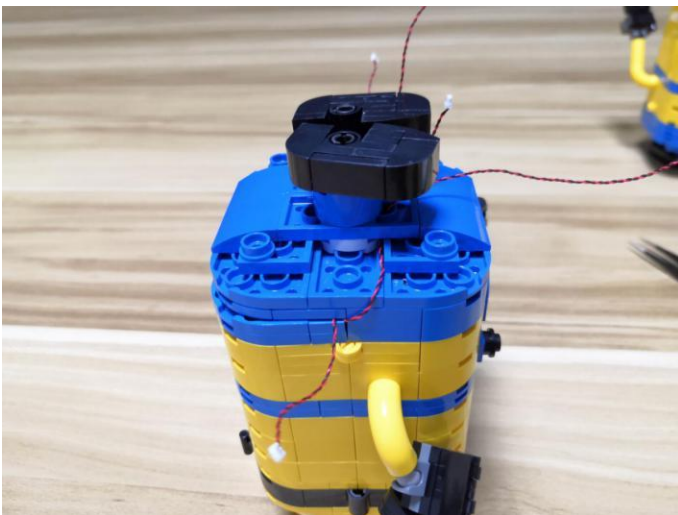
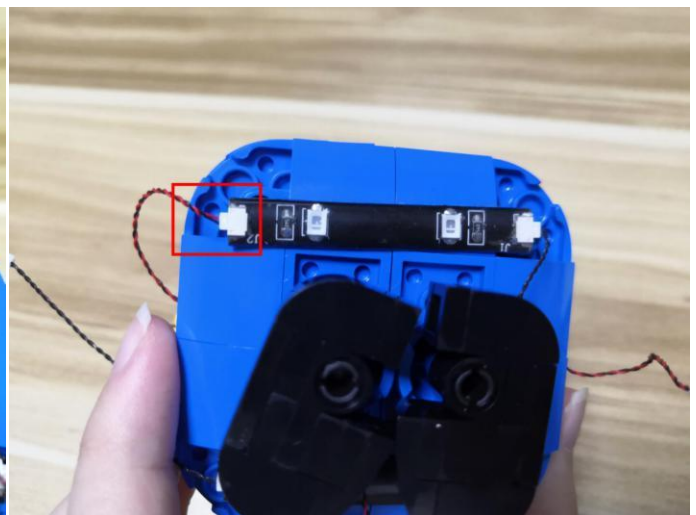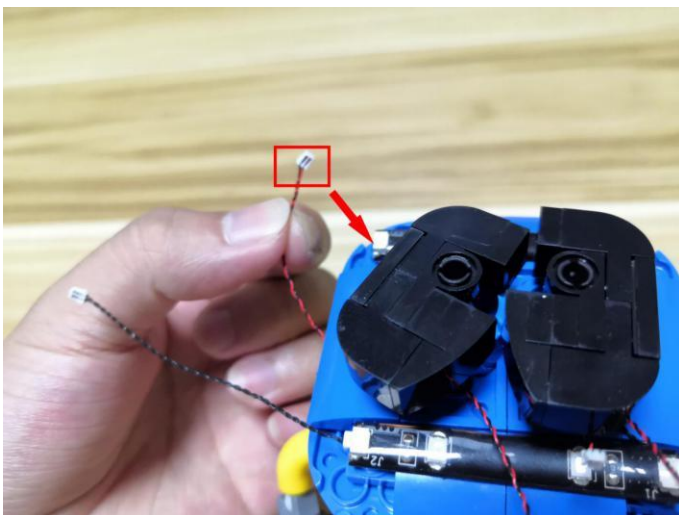**63.Continue to reconnect the pieces we removed before.**
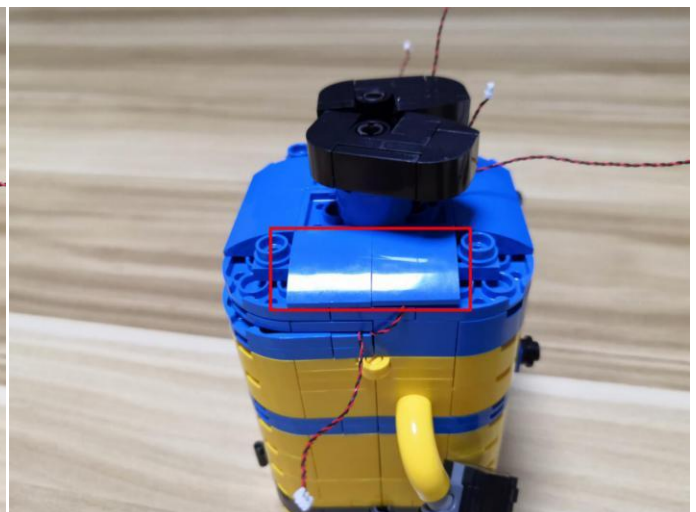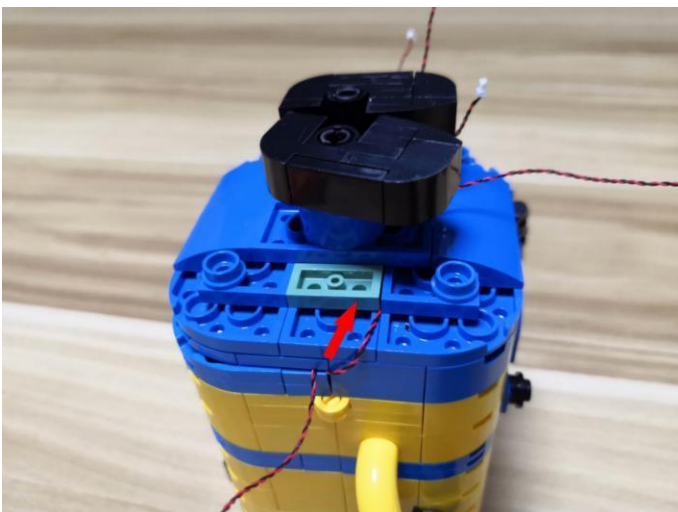
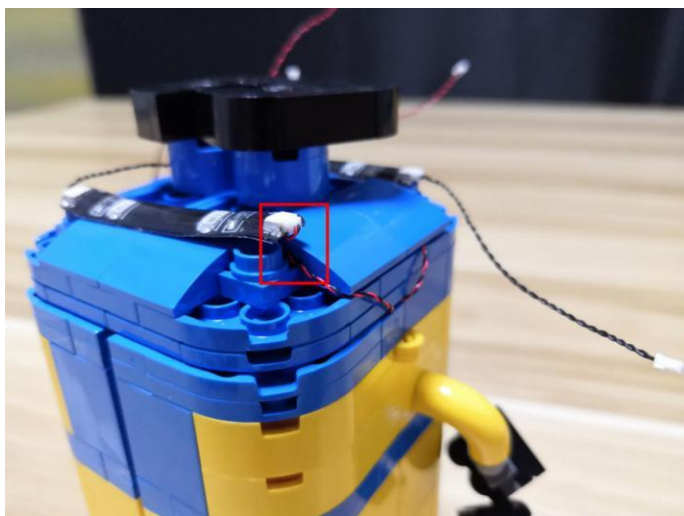**64.Take 2 blue strip lights, two 5cm connecting cables, assemble them as per below.**
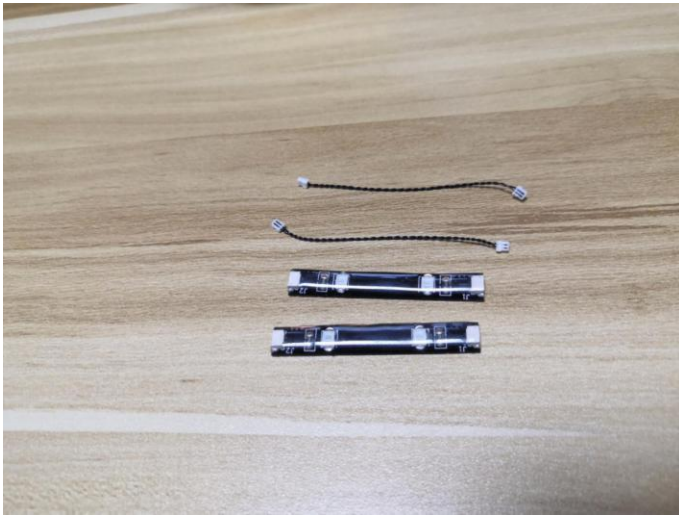
65.Stick the strip lights to the following places (pull the 5cm connecting cable leftward).
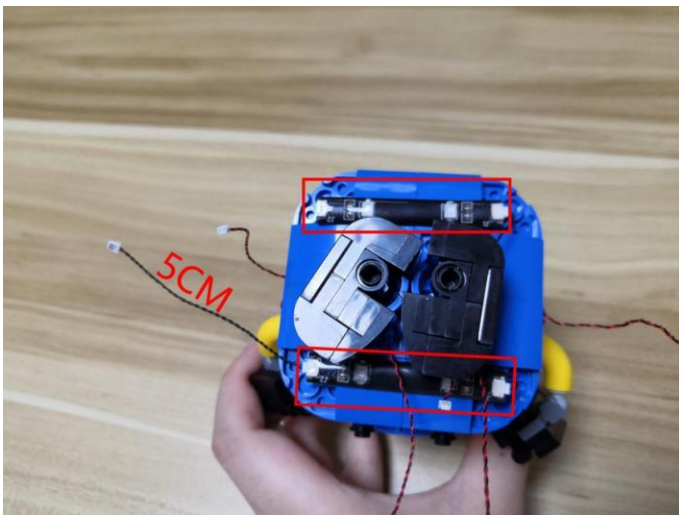
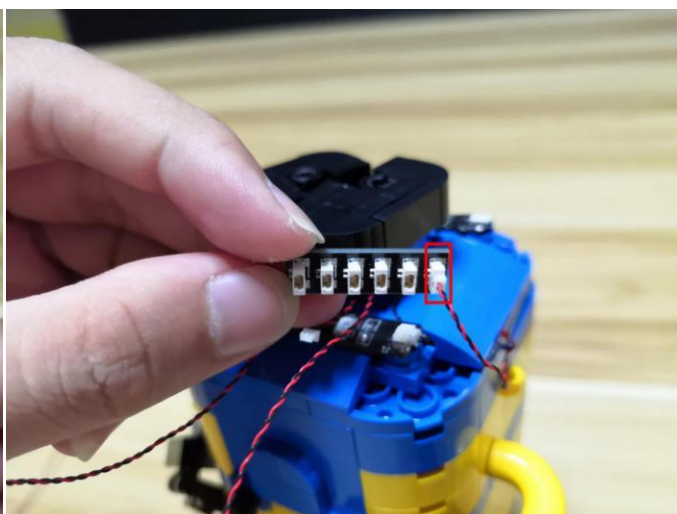**66.Connect the following cable to the spare port on the strip light.**
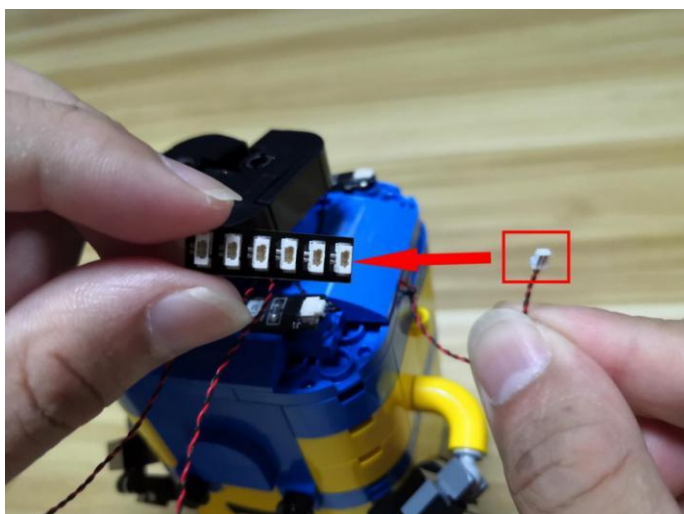
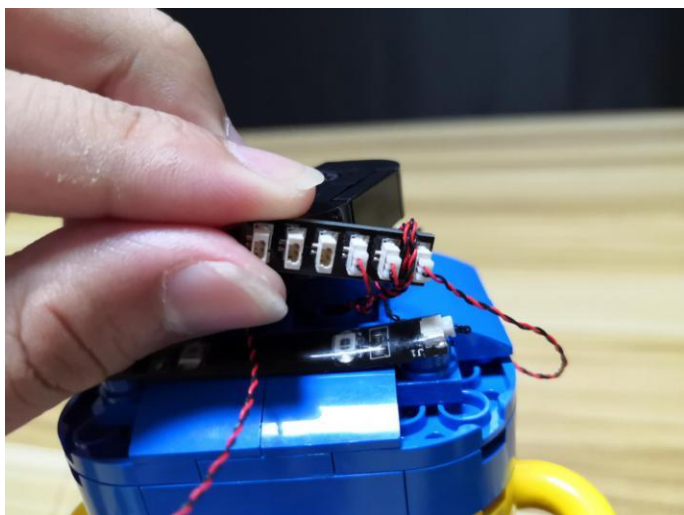**67.Tuck excess cable, stick it underneath strip light or tuck it at the corner.**

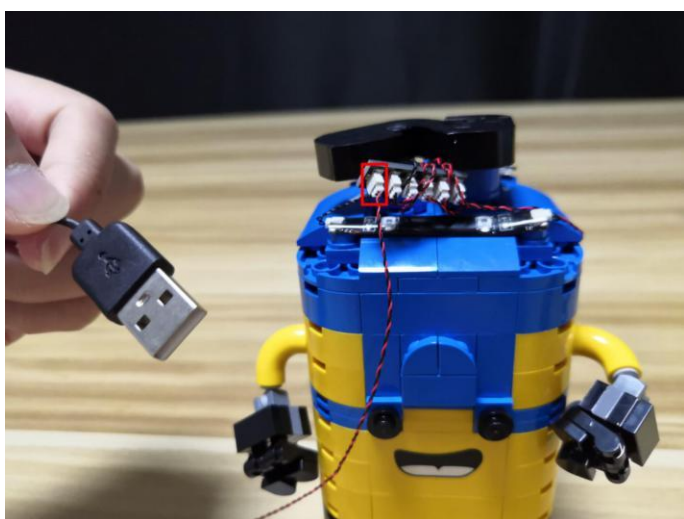**68.Take a USB cable, a 6-port expansion board, 2 adhesive squares.**

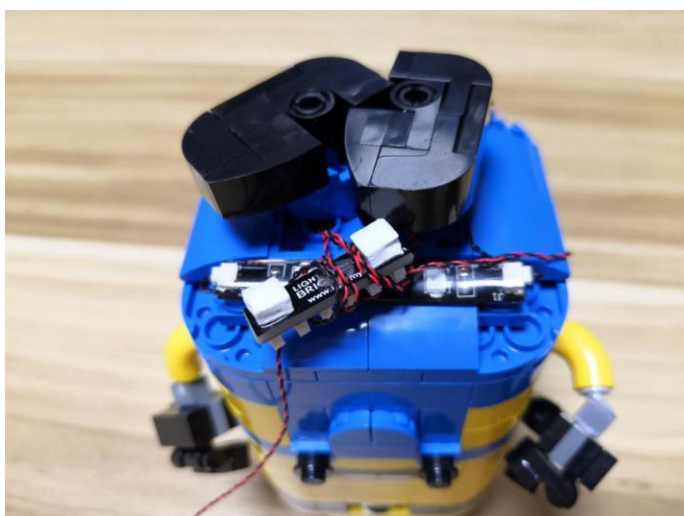**69.Connect the following shorter cable to the expansion board.**

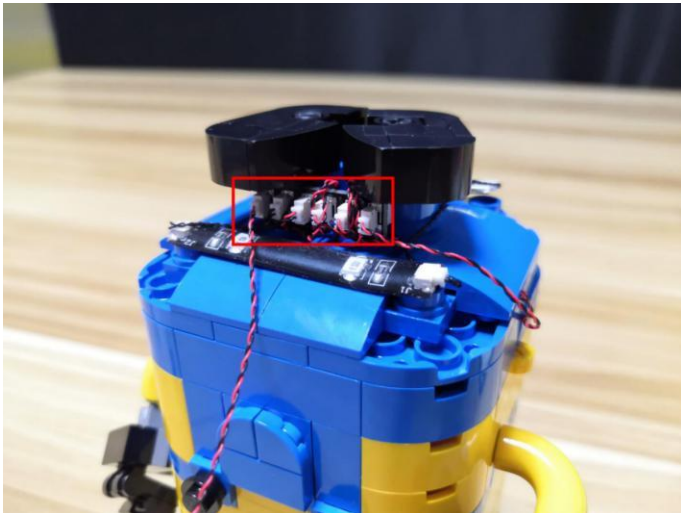**70.Connect the other cables to the expansion board as per below.**

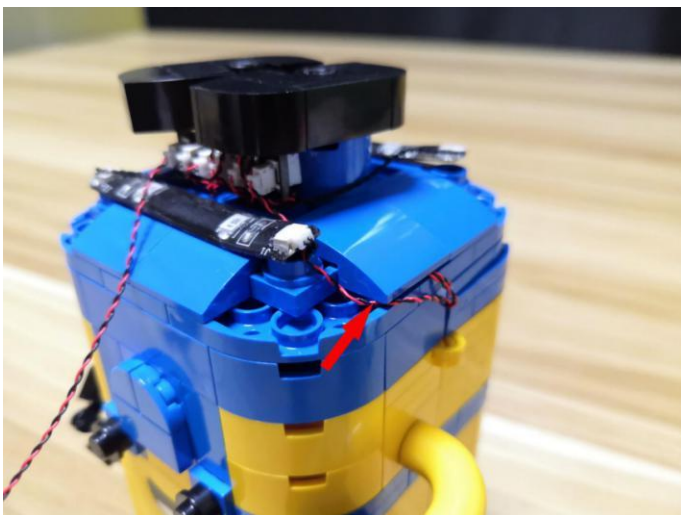**71.Connect the USB cable to the expansion board.**

72.Stick the adhesive squares to the back of the expansion board.

73.Stick the expansion board to the following place (close to the feet).
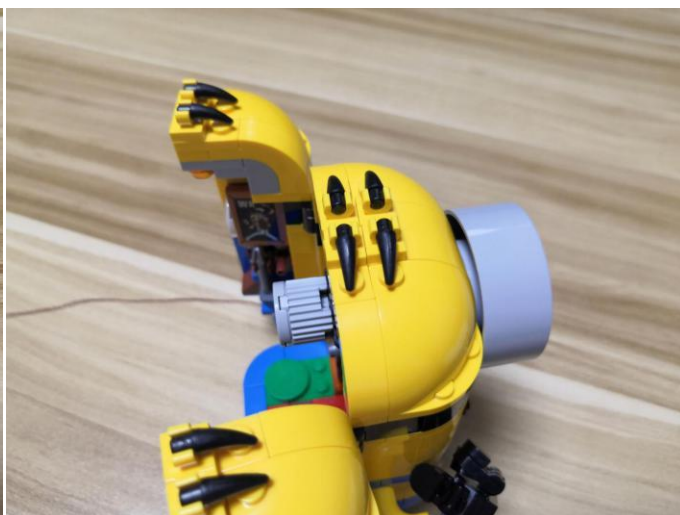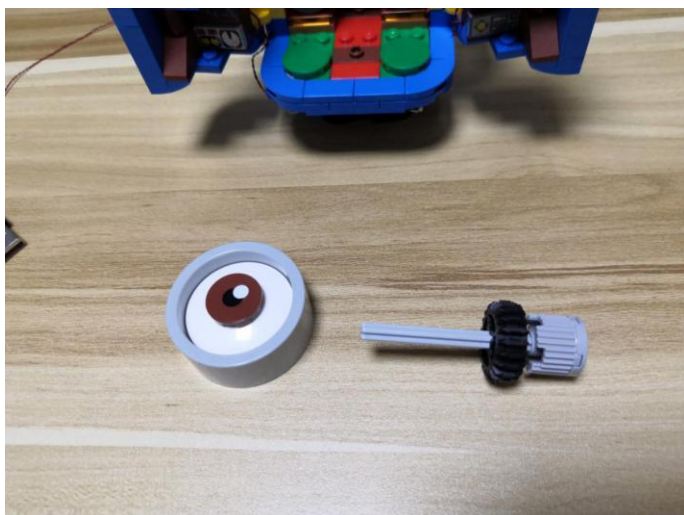

74.Stuck the shorter cable at the following space as per below.

75.Open the door to see if it's flexible.

76.Reconnect the following eye pieces.

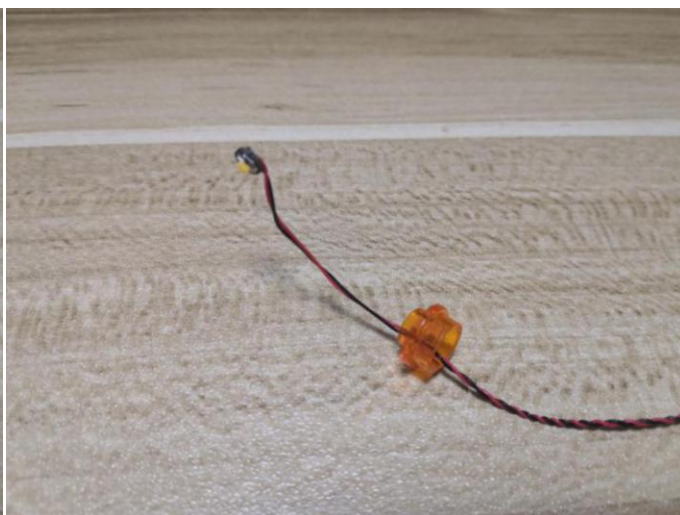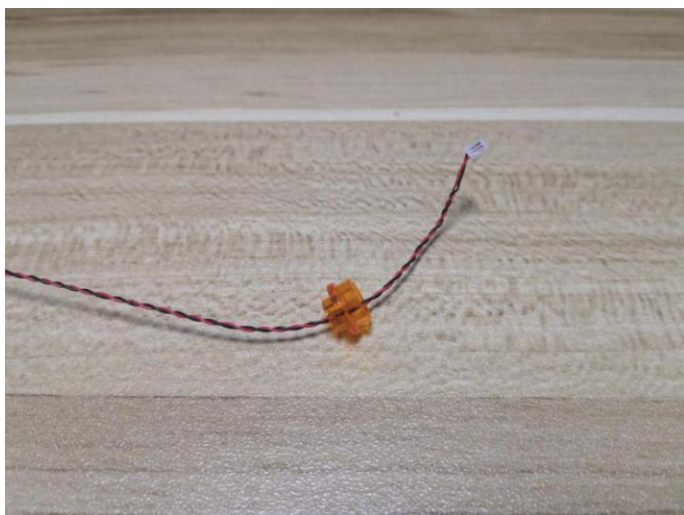# 77.Turn the power on to verify the lights.

78.Take the minion with 2 eyes. Turn to the back and open it.

79.Take 2 warm white 30cm dot lights, 2 orange 1x1 round plates with hole.
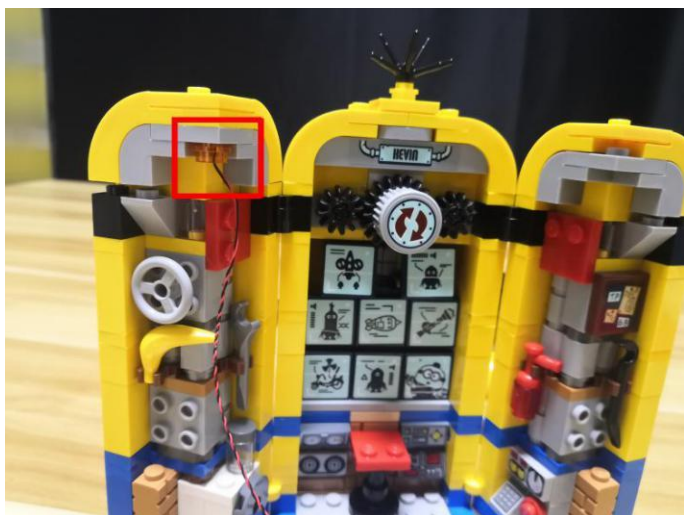

80.Thread the cable through the round plate (place the cable in the right direction).

81.Bend the cable as per below, with lighting part facing the round plate.
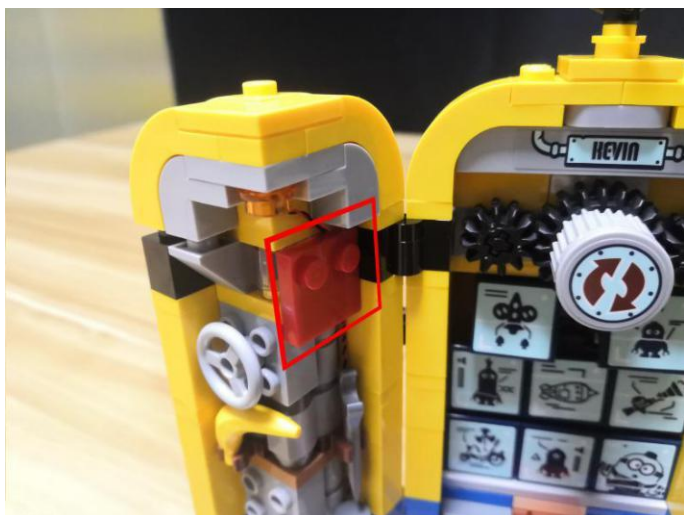
82.onnect the light to the following place.

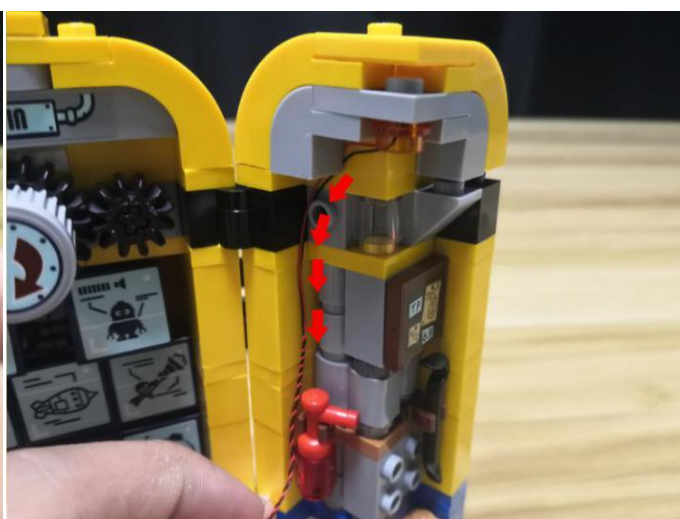## 83.Install the other light in the same way.

84.Disconnect the following red piece, place the cable as per below.

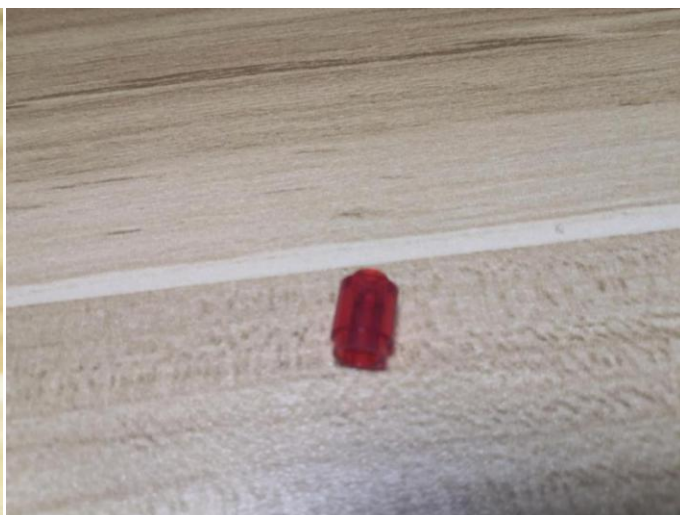## 85.Reconnect the red piece.

86.Repeat the steps to secure the cable at the other side.
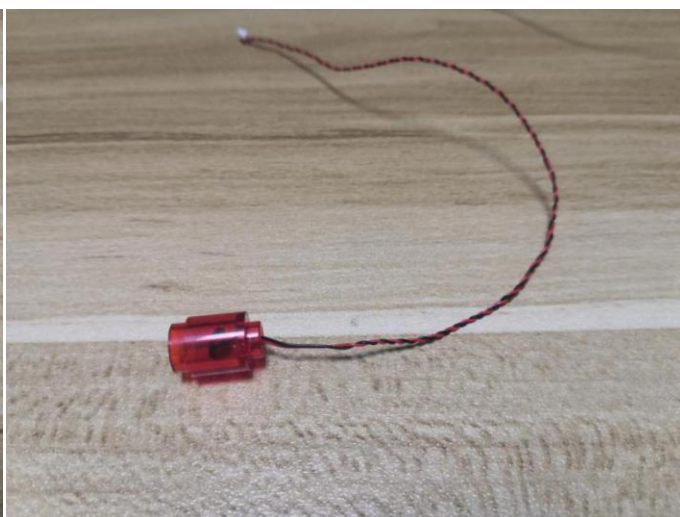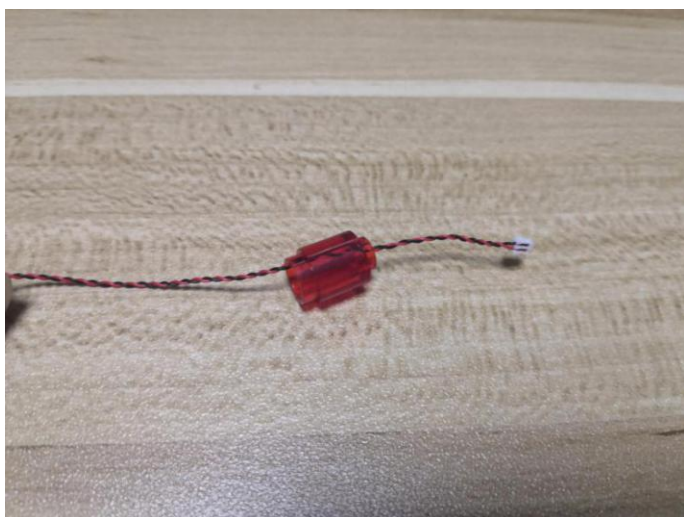

87.Reconnect the red piece.

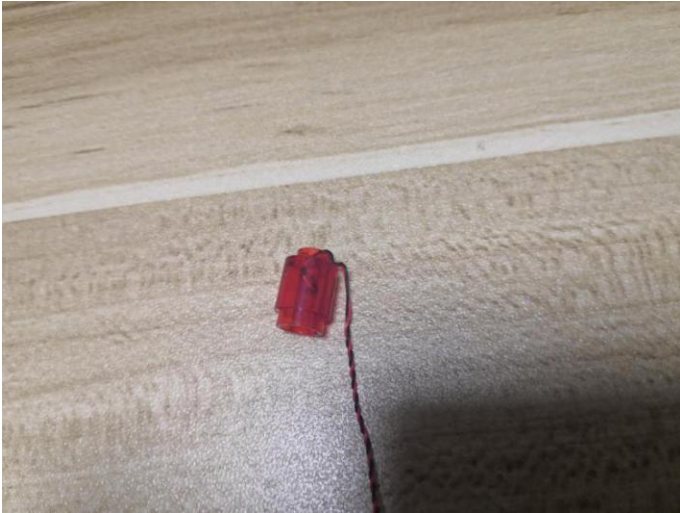**88.Disconnect the following red piece.**

89.Take a red 15cm dot light.

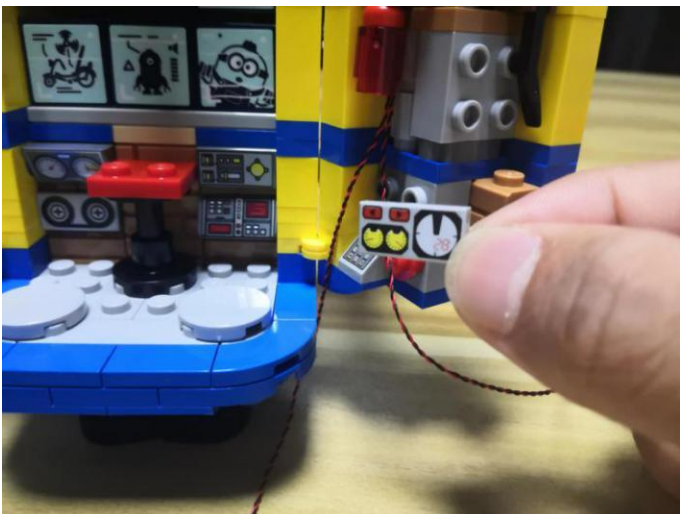**90.Thread the cable through the red piece (please thread it in the right direction).**

91.Bend the cable as per below.

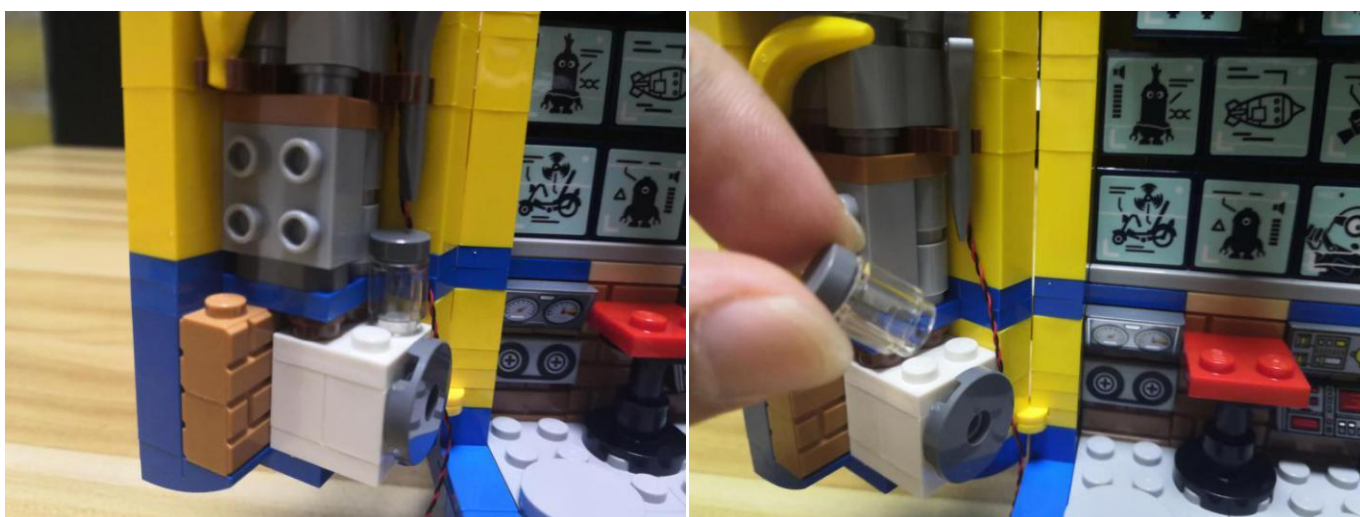## 92.Reconnect the red piece.
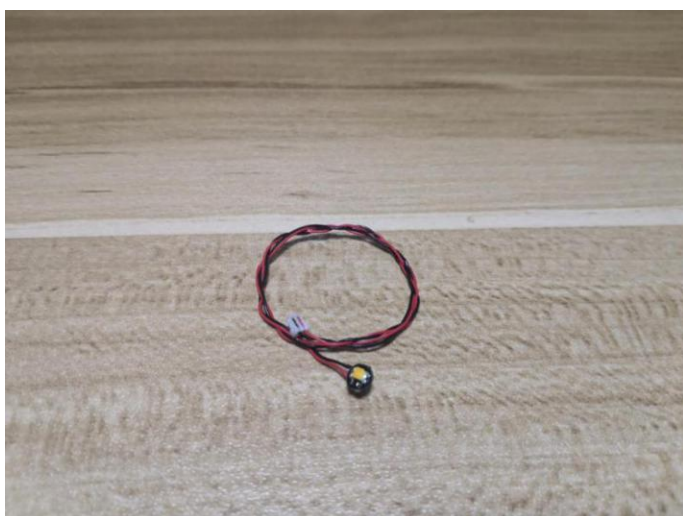

93.Disconnect the following piece.

94.Place the cable as per below, reconnect the piece.
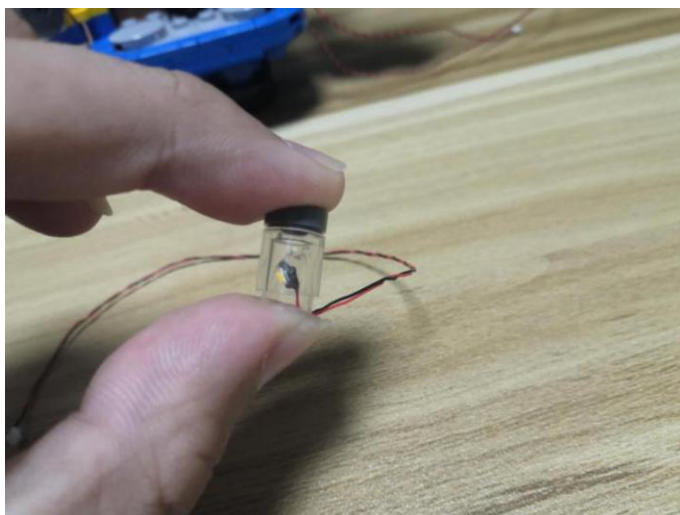

95.Turn to the left, disconnect the following trans piece.
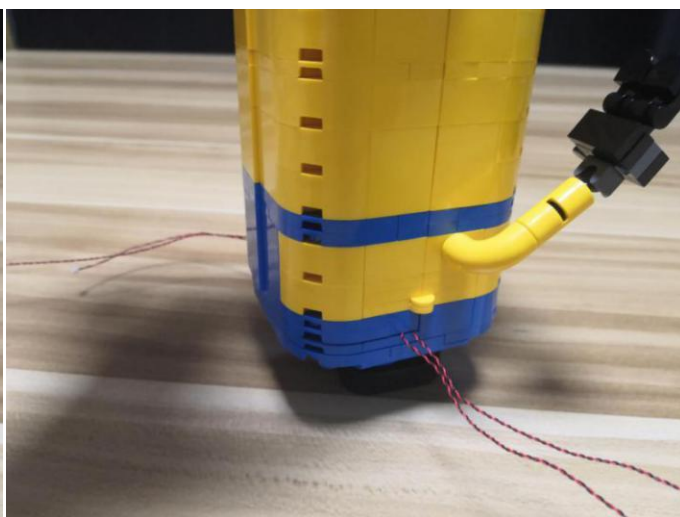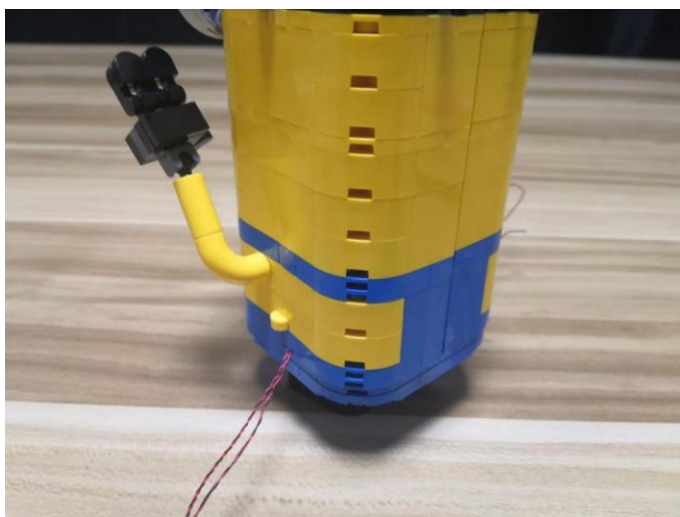

96.Take a warm white 15cm dot light.

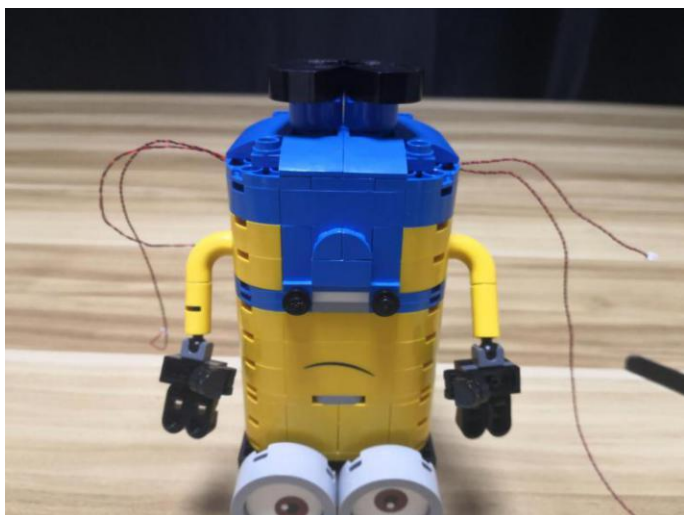**97.Place the light inside the trans piece, reconnect this piece.**
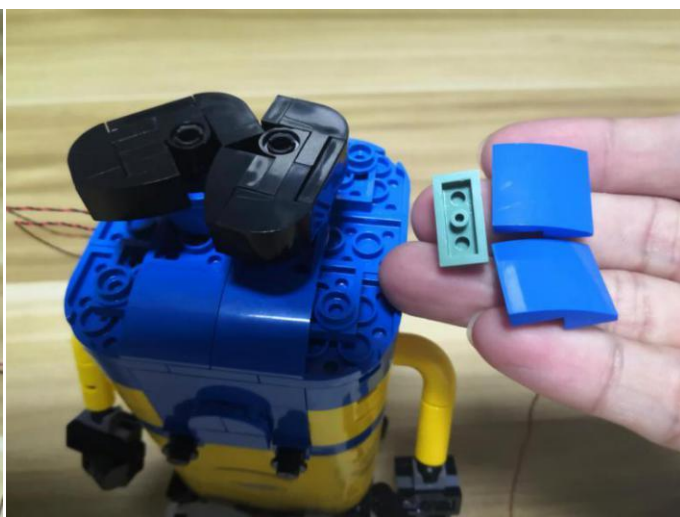

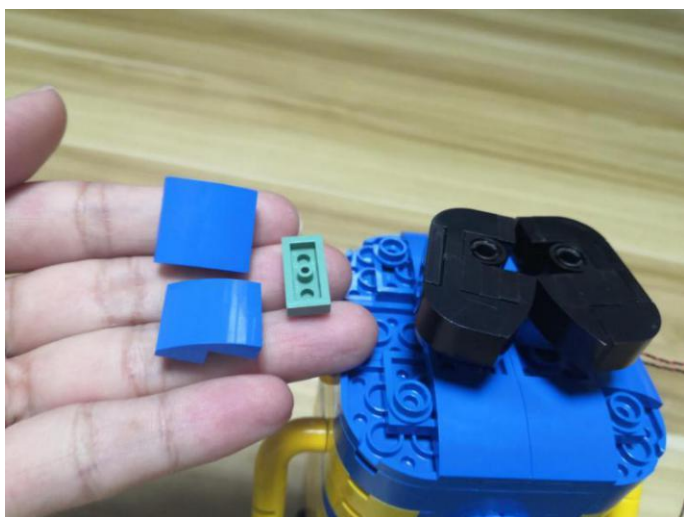**98.Close the back, place the cables as per below.**

99.Disconnect the following piece from the top.
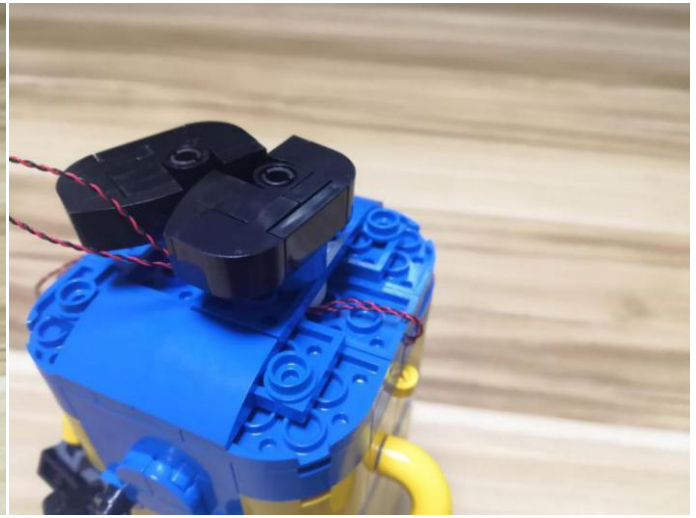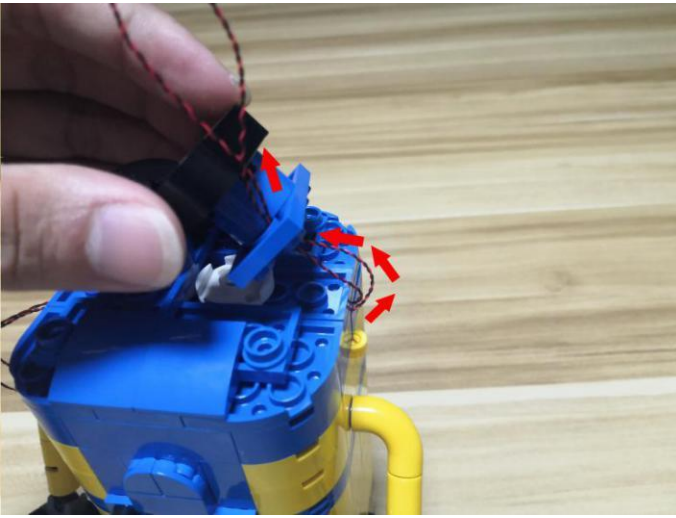
100.Turn the minion upside down.

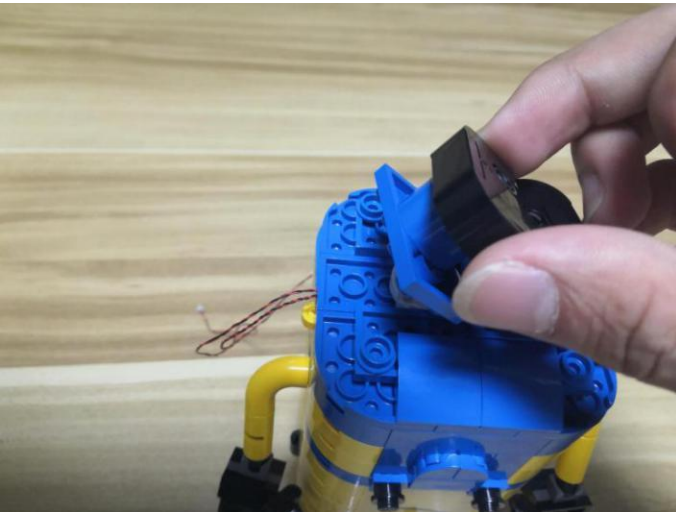# 101.Remove the following pieces as for did for the last minion.
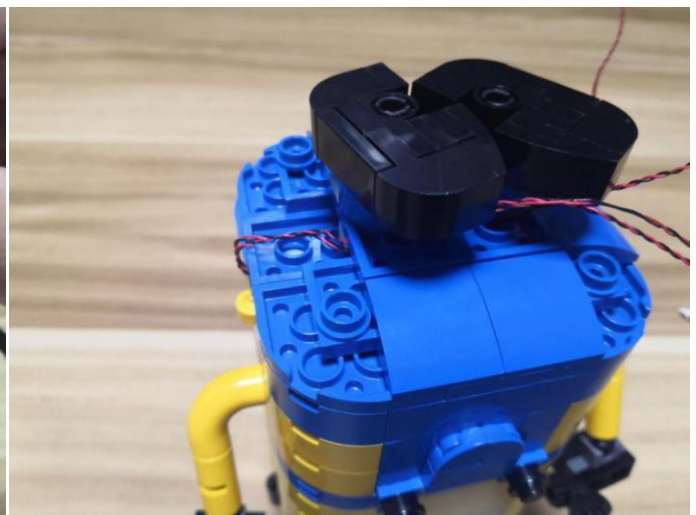

102.Pull the right foot up.

103.Thread the cable from the right side through as per below, reconnect the foot.
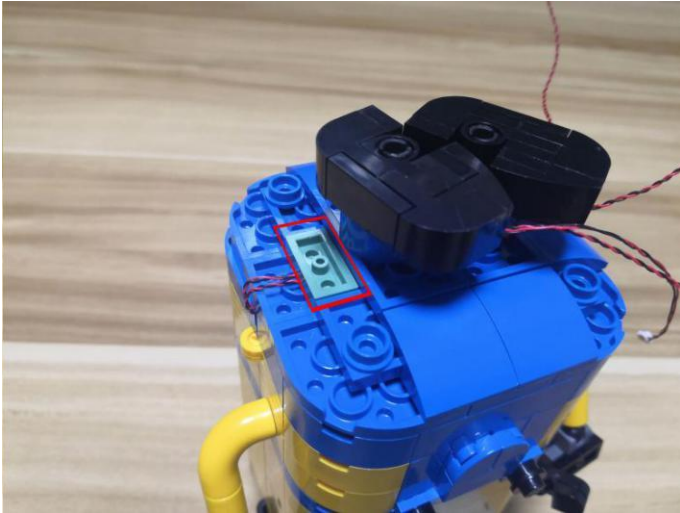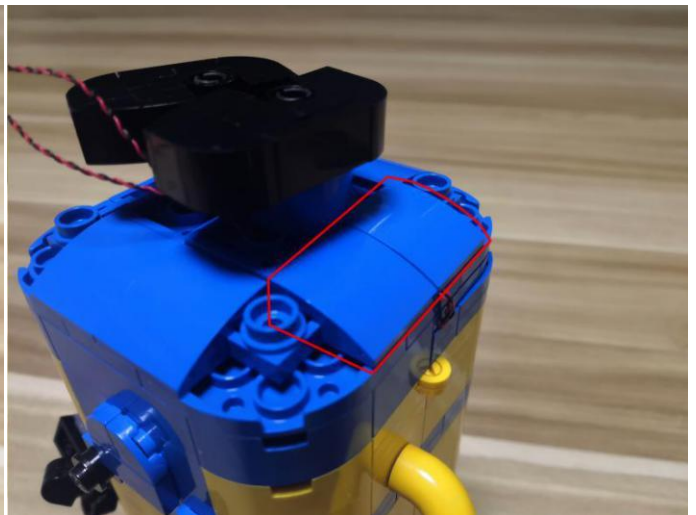
104.Pull the left foot up.

105.Thread the cable from the left side through as per below, reconnect the foot.
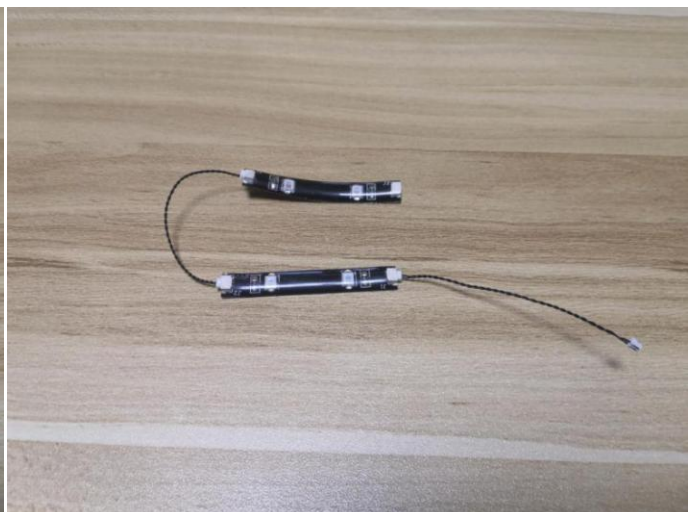
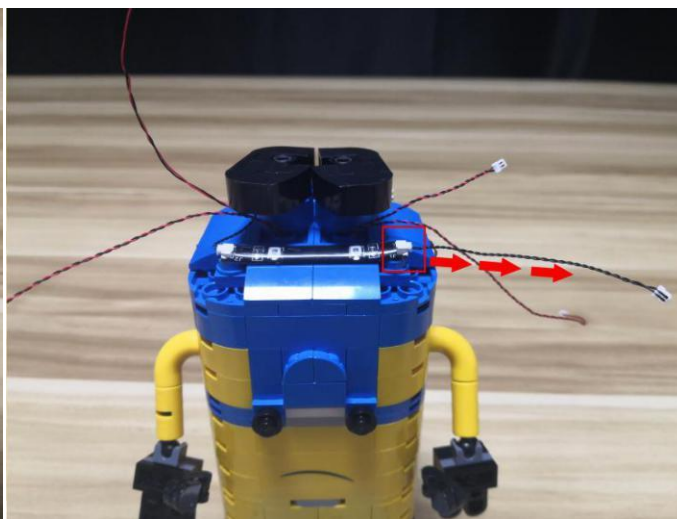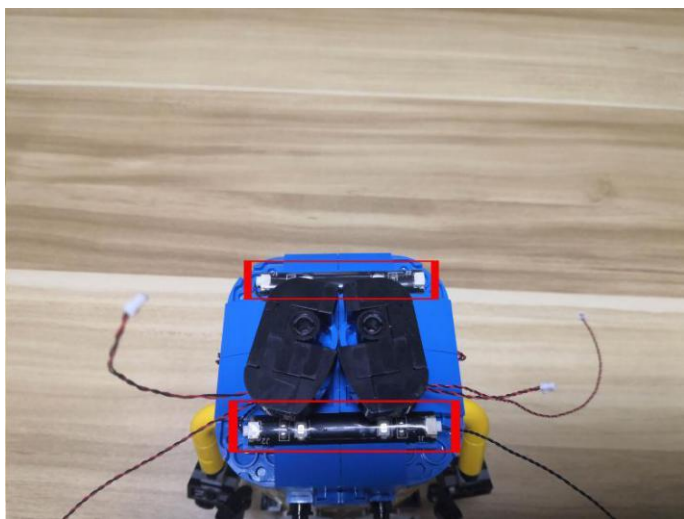**106.Reconnect the following piece at the left side.**

107.Reconnect the following piece at the right side

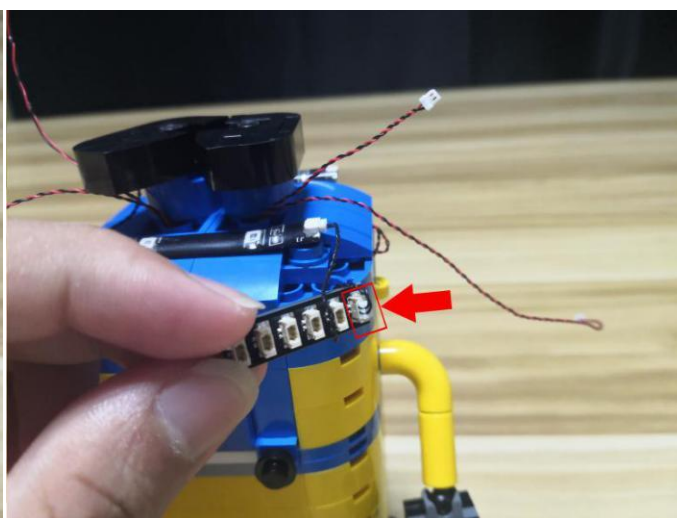**108.Take 2 blue strip lights, two 5cm connecting cables, assemble them as per below.**
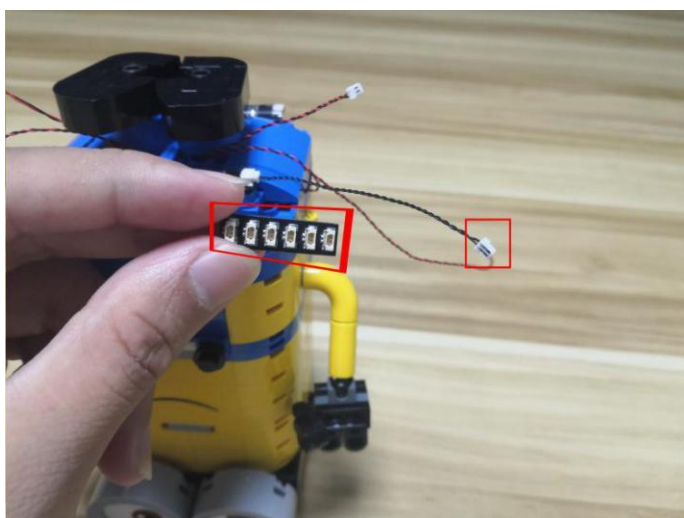
109.Stick the strip lights to the following places (pull the 5cm connecting cable rightward).
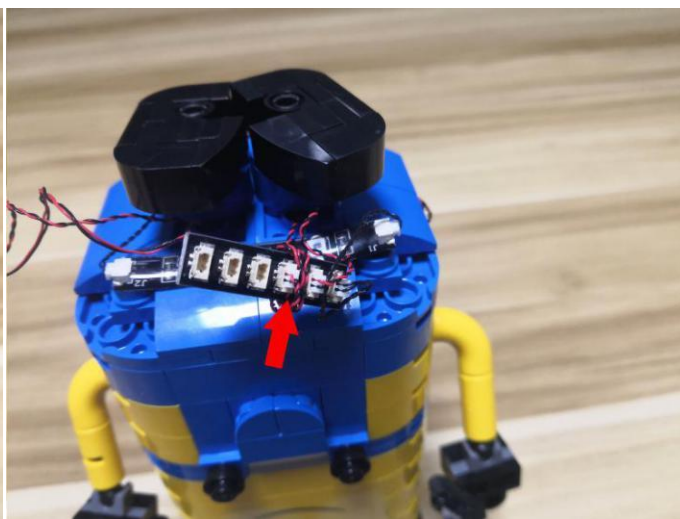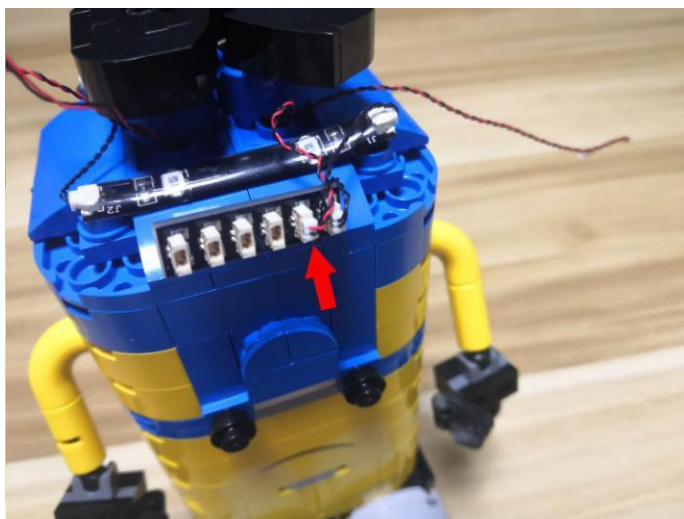

110.Take a 6-port expansion board, a USB cable, 2 adhesive squares.
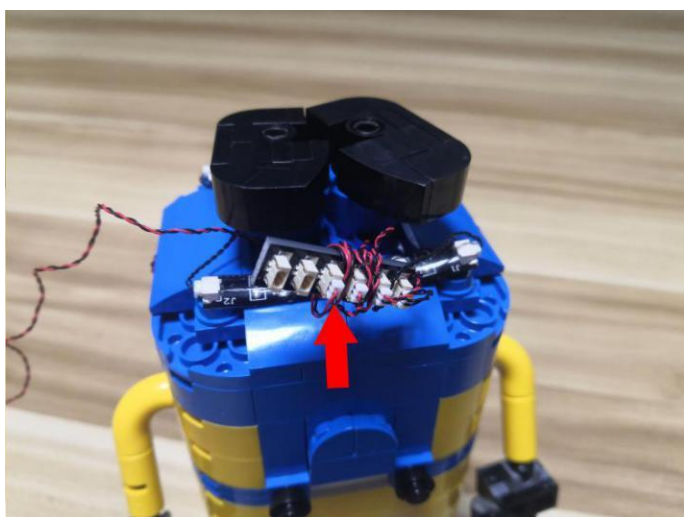

111.Connect 5cm connecting cable from the strip light to the 6-port expansion board.
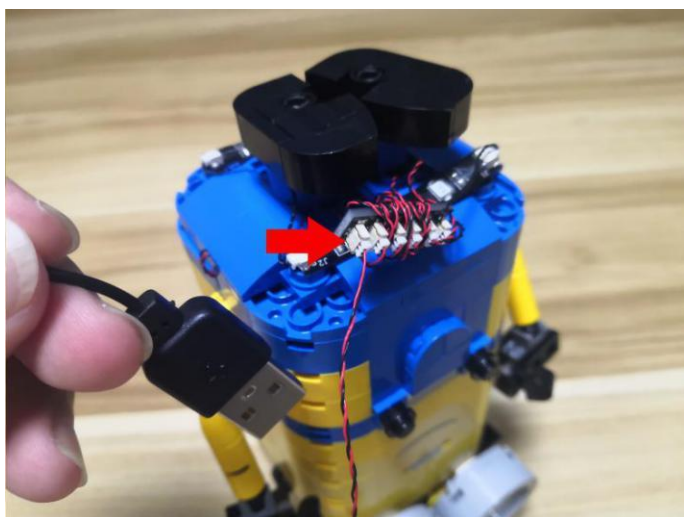
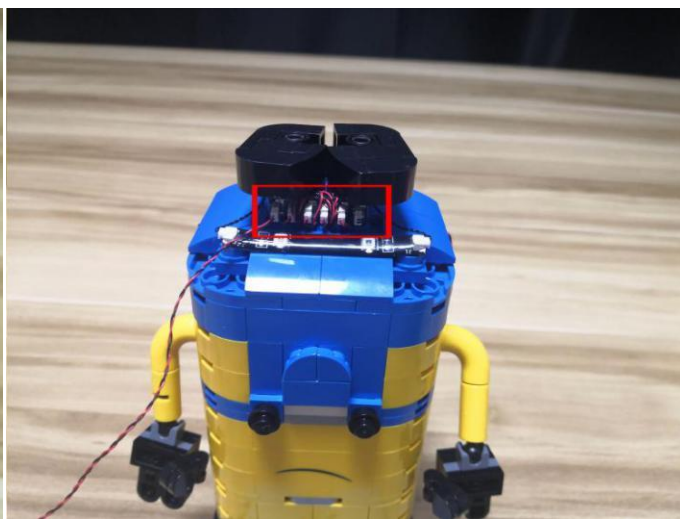**112.Connect the 2 cables from the right side to it (you can tuck excess cables around the expansion board).**

113.Connect the cables from the left side to it.

114.Connect the USB cable to it.

115.Stick the adhesive squares to the back of the expansion board, stick the expansion board to the following place.

116.Turn the minion back, reconnect the top piece.

117.Turn the power on to see if the lights are working OK.

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