

# 10303 Loop Coaster P38703

- P38703 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 “10303 P38703”.
- 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 steps.

## Section A: Check the type and quantity of components.

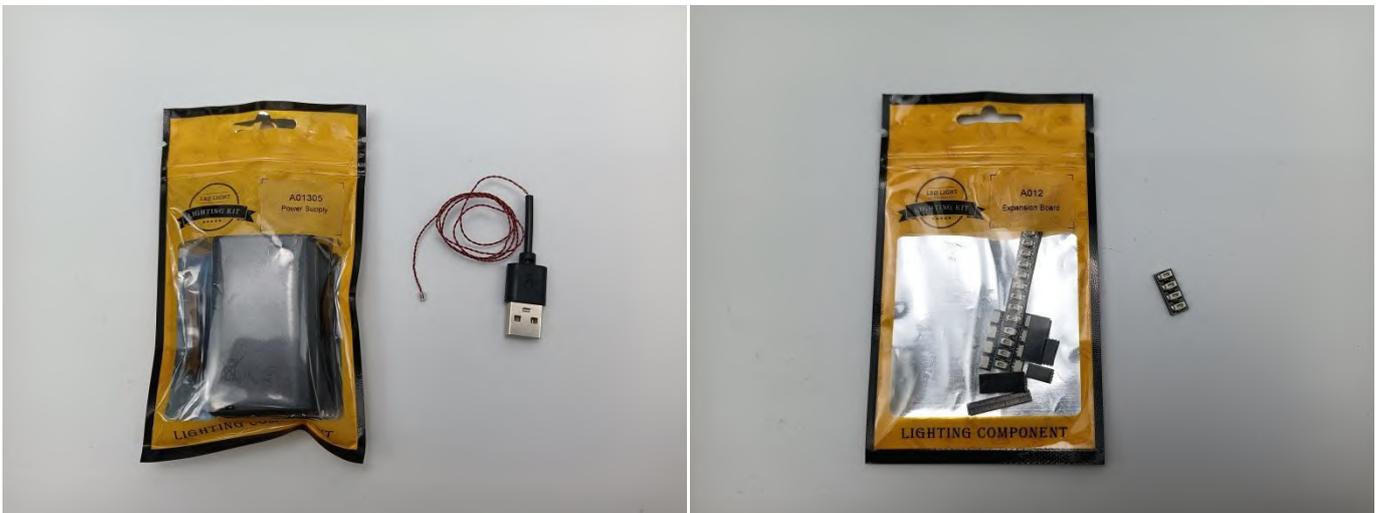
There are 20 bags in this set. The name and quantities of specific components are as shown , please check carefully.

Label	Content	Quantity
A01004 Light-15CM Green	Light-15CM Green	2
A01011 Light-30CM Warm White	Light-30CM Warm White	4
A01015 Flash Light-15CM Orange	Flash Light-15CM Orange	1
A01016 Flash Light-30CM Orange	Flash Light-30CM Orange	1
A01023 High-Brightness Light 30CM-Warm White	High-Brightness Light 30CM-Warm White	1
A01105 LED Strip Warm White	LED Strip Warm White	3
A01107 LED Strip Slow Flash Multi-Colour	LED Strip Slow Flash Multi-Colour	5
A012 Expansion Board	8 Socket Expansion Board	1
	4 Socket Expansion Board	5
	4 Socket Expansion Board-flat	3
A01305 Power Supply	Power Supply	1
A01501 Connecting Cable 5CM	Connecting Cable 5CM	3
A01503 Connecting Cable 30CM	Connecting Cable 30CM	10
A01504 Connecting Cable 50CM	Connecting Cable 50CM	1
A01505 Connecting Cable 10CM	Connecting Cable 10CM	1
A01506 Connecting Cable 20CM	Connecting Cable 20CM	2
A01801 Flash Light 30CM-White	Flash Light 30CM-White	1
A023 Multi-Colour String	Multi-Colour String	7
A02510 Light Strip-Cyan	Light Strip-Cyan	2
A02516 Light Strip-Warm White	Light Strip-Warm White	2
A03701 Remote Control	Remote Control	1
<b>Components</b>		

Please contact us immediately if there have any missing components.

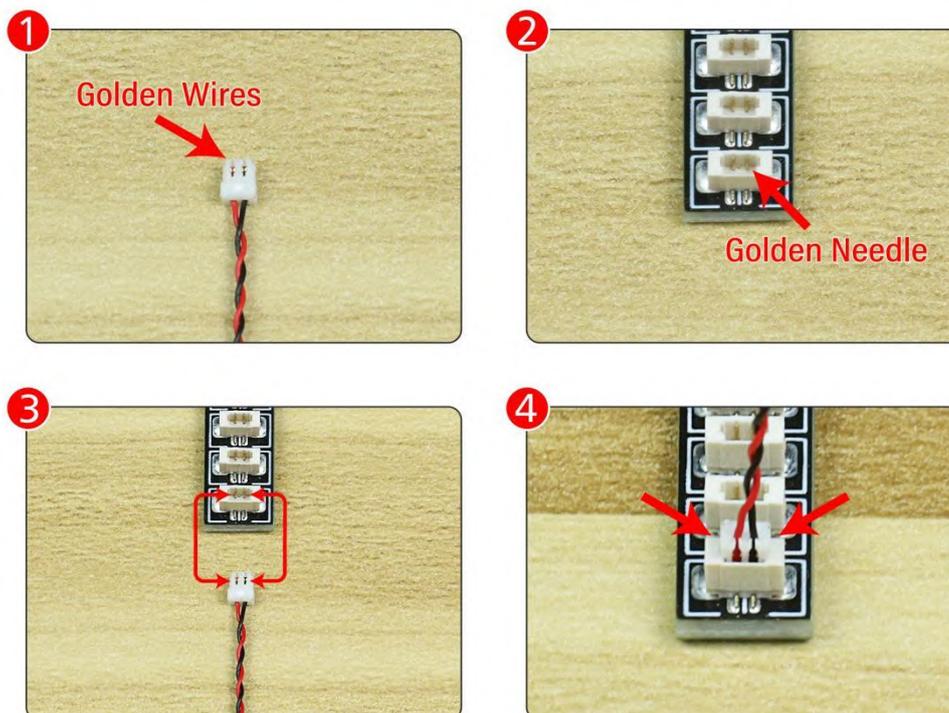
## Section B: Test that each components is working properly.

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



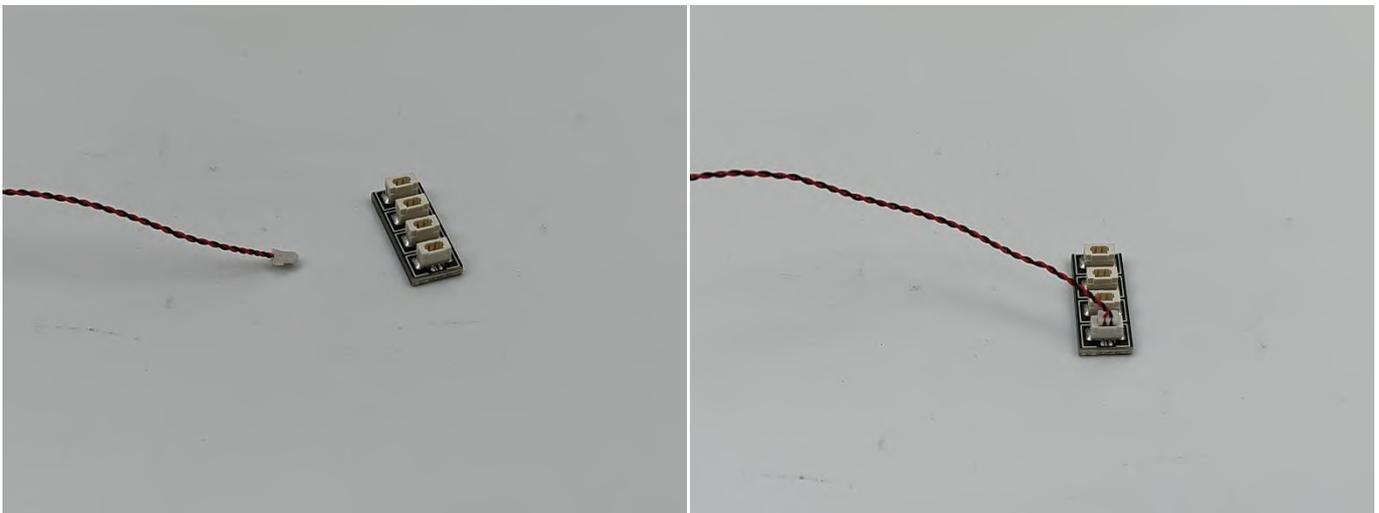
It is worth reminding that our products are all customized. They have a unique way of connecting. The white plug on wire and the socket of the expansion board need to be connected together to transmit power.

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.

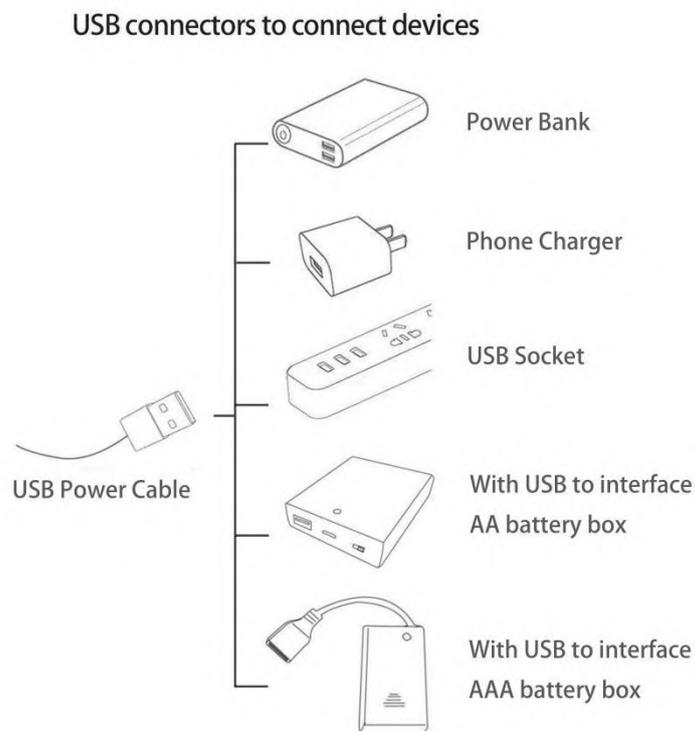


All our connections between plug and socket are all the same as shown above. So for any such structure with plug and socket, please pay attention to the golden wire of the plug and the golden needle of the socket, they must be touched together.

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.

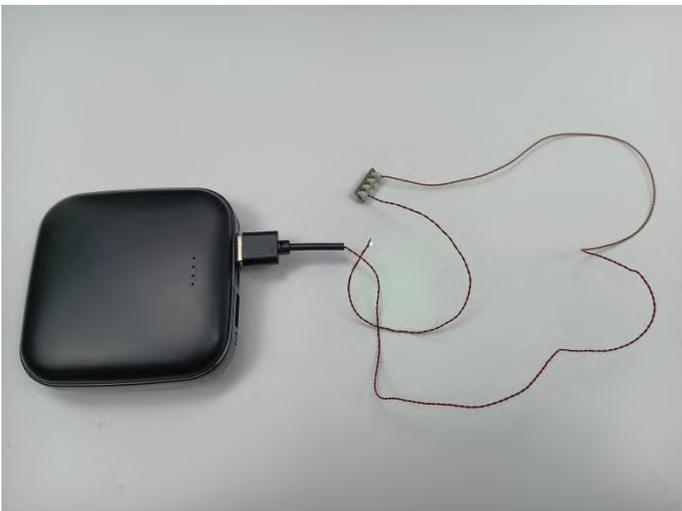


**This instruction will use the power bank as power supply . The test structure is shown as follow. All lamp in this set will be tested by this structure.**

**The battery box can also power the set. If it is necessary to change the power supply , prepare three AAA batteries, install them in the battery box, turn on the switch on the battery box, remove the plug of the USB Power Cable from the socket of the expansion board,plug the plug of the battery box to the same socket in the expansion board to power the suit as well.**



**when we test " Light-15CM Green" particles,Take out the bag labelled " Light-15CM Green".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\*Light-15CM Green,4\*Light-30CM Warm White,1\*Flash Light-15CM Orange,1\*Flash Light-30CM Orange,1\*High-Brightness Light 30CM-Warm White,3\*LED Strip Warm White,5\*LED Strip Slow Flash Multi-Colour,1\*Flash Light 30CM-White,7\*Multi-Colour String,2\*Light Strip-Cyan,2\*Light Strip-Warm White.  
Please contact us immediately if any components don't work.

The remote control does not contain batteries, please buy a 2025 or 2032 button battery in the nearest store and install it in the remote control.

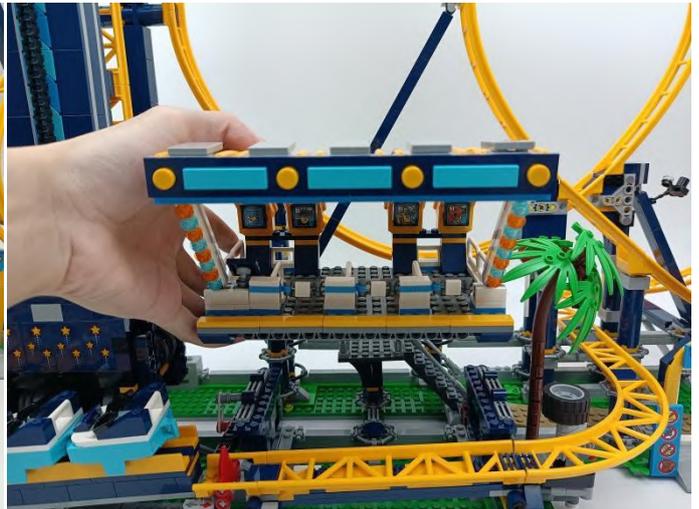


## Section C: laying out components following the instruction.

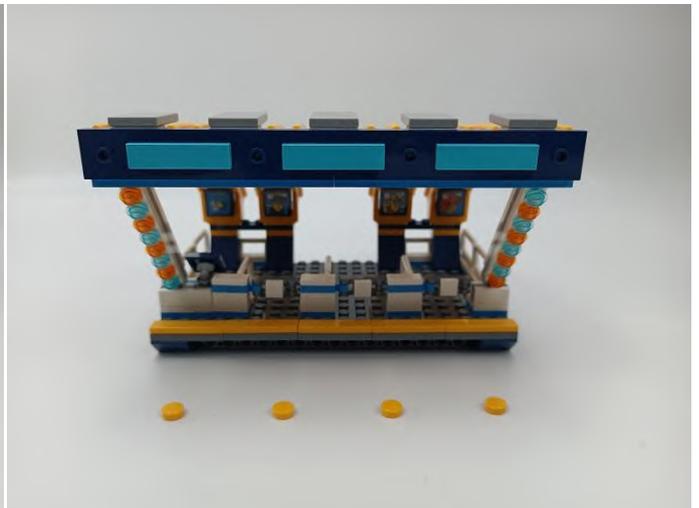
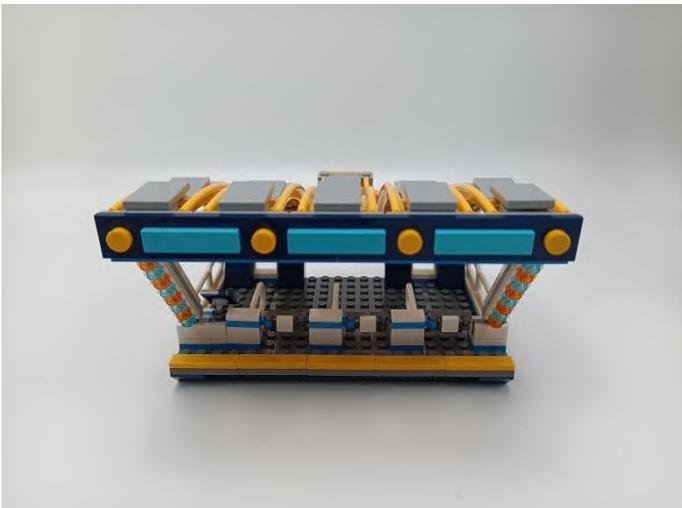
1



2



3



4



5

## 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:

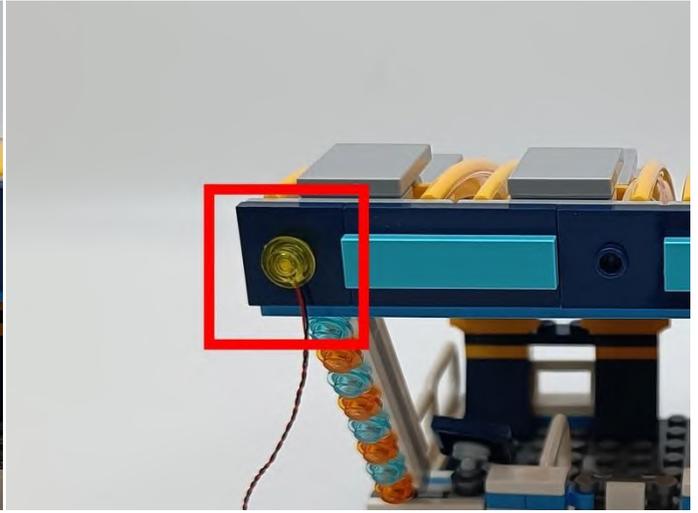
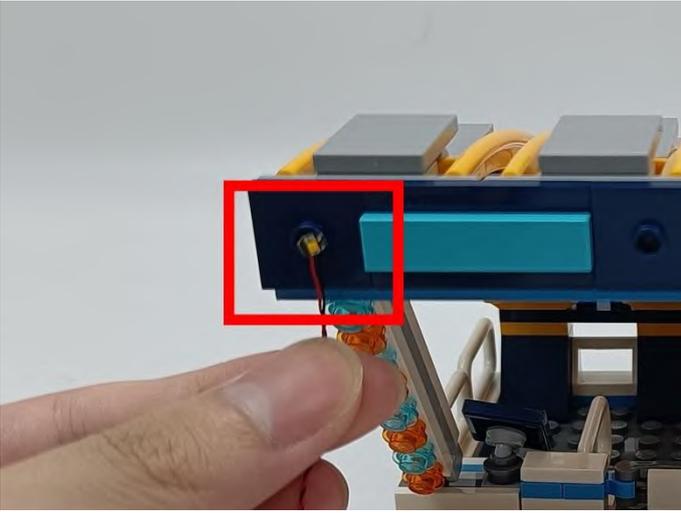
### **The plate with slit:**

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

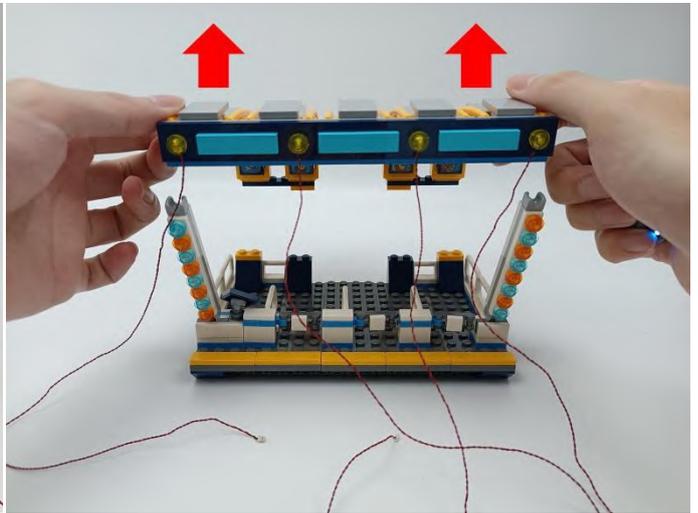
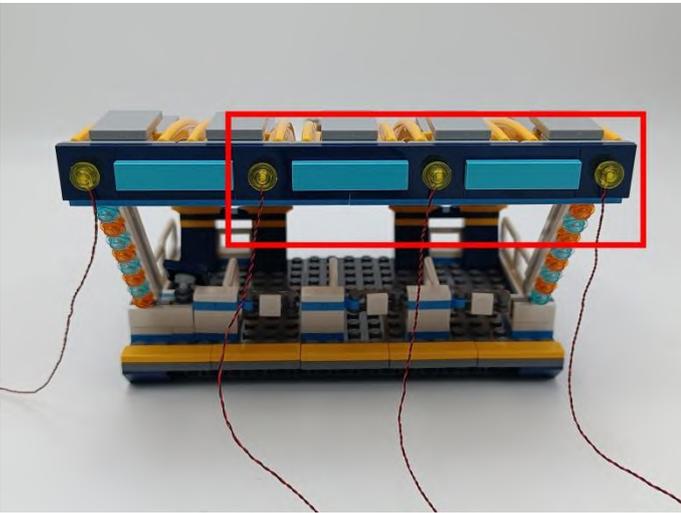


The slit on the the plate round 1X1 are hand-made to avoid squeeze the wire and cause short circuit and abnormalheat during installation.

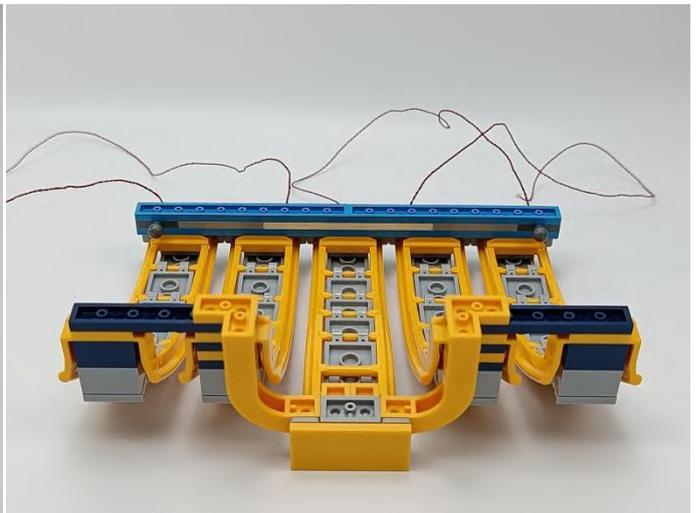
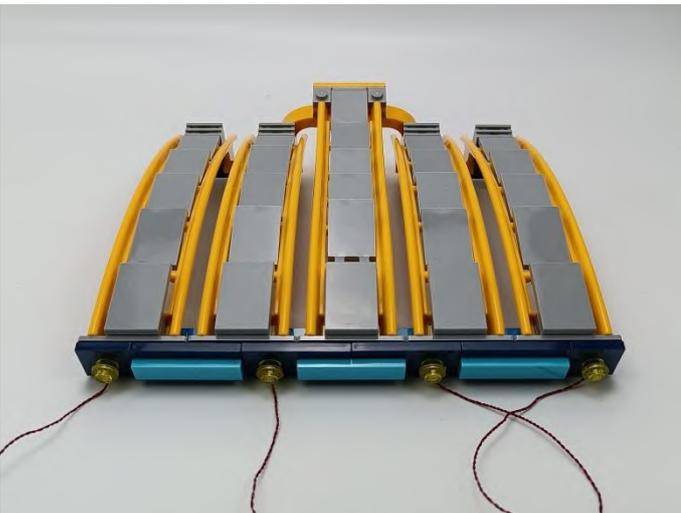
6



7



8



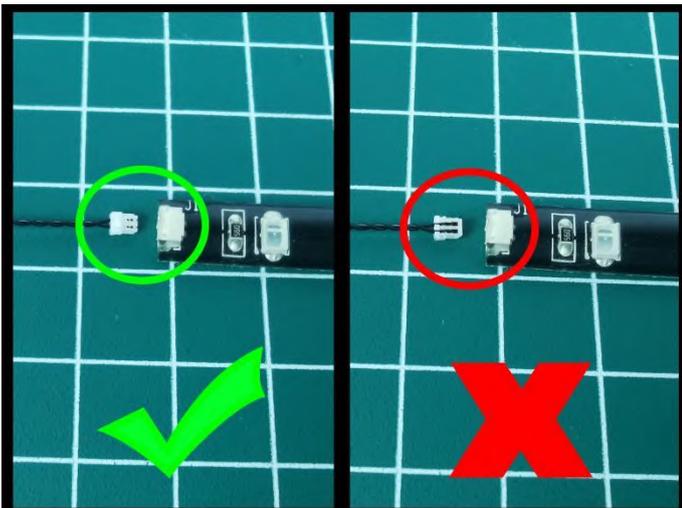
9



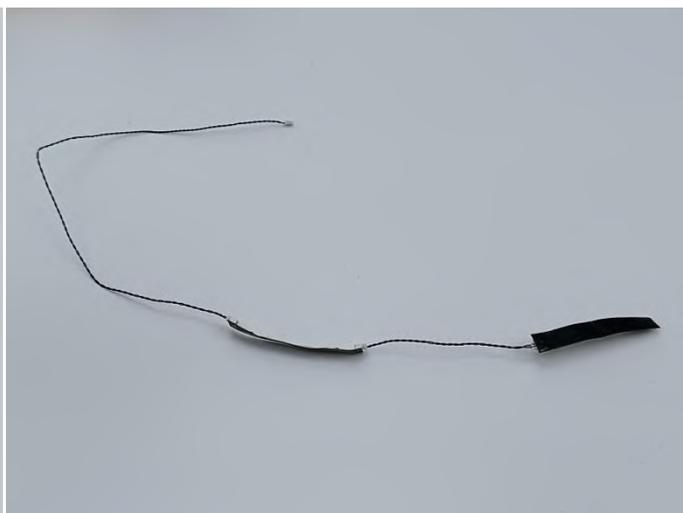
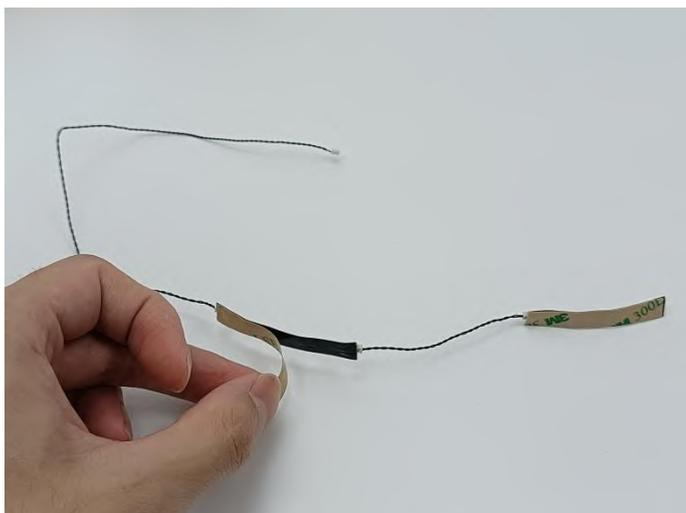
10



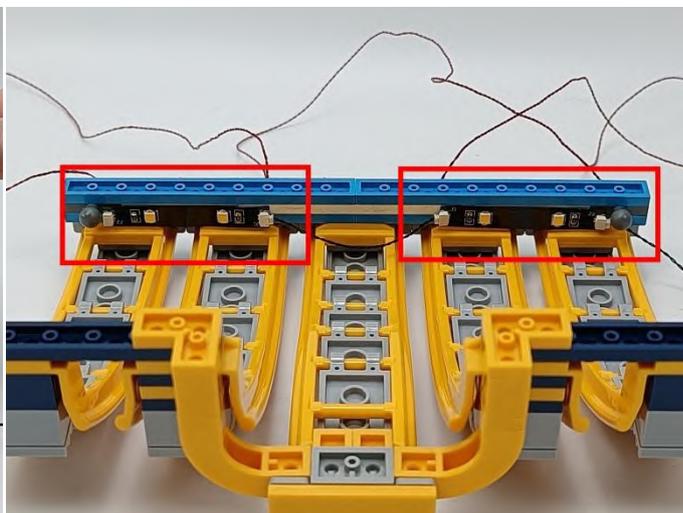
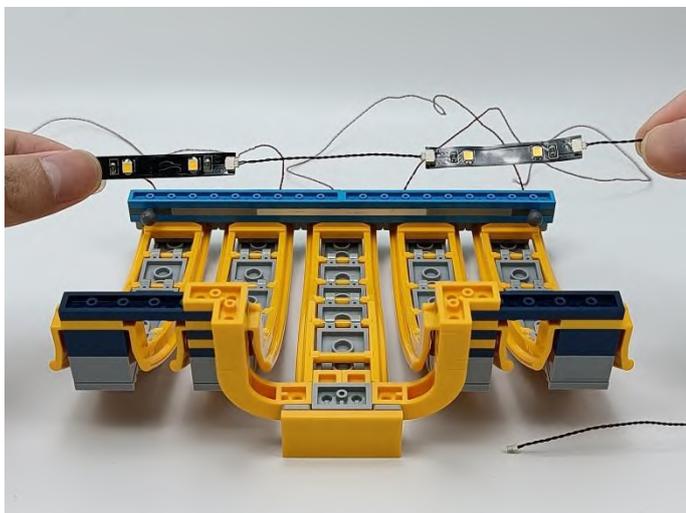
11



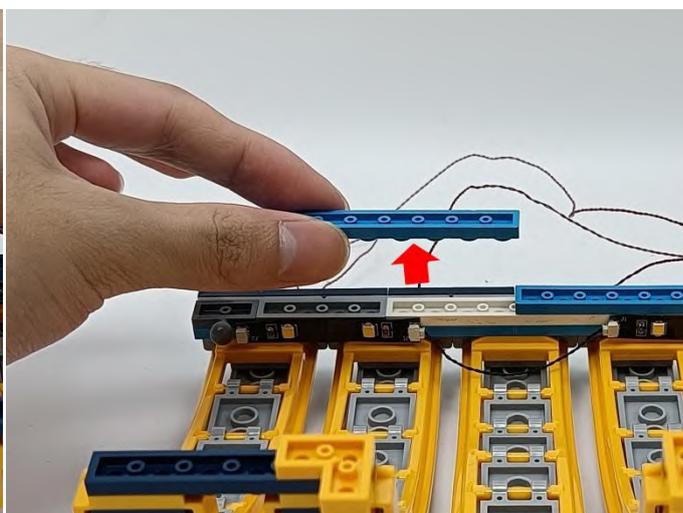
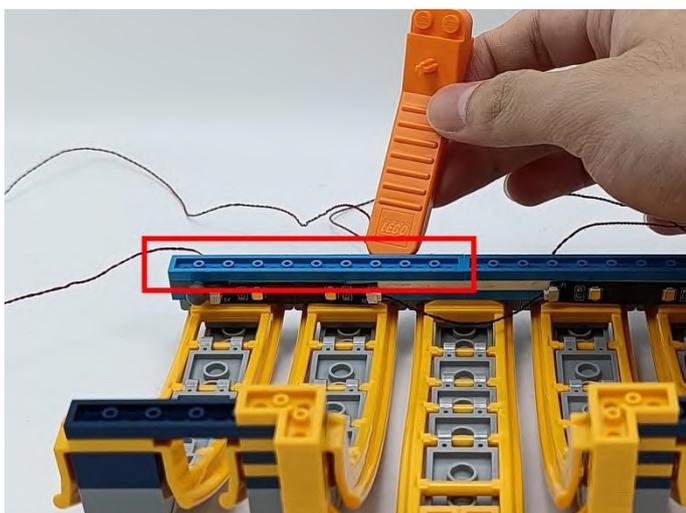
12



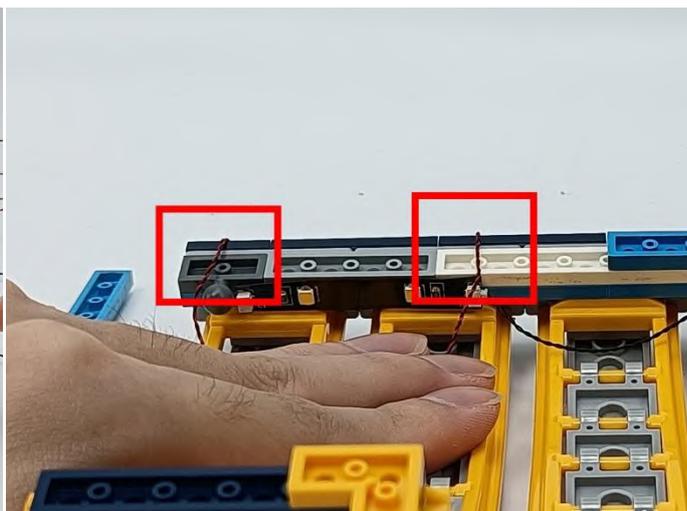
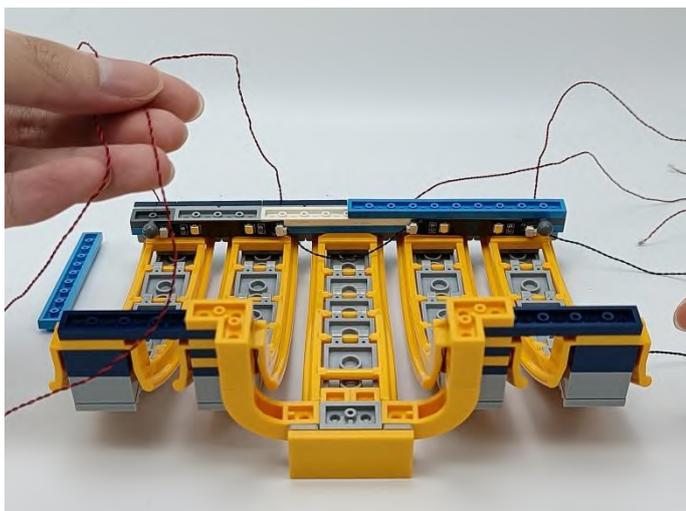
13



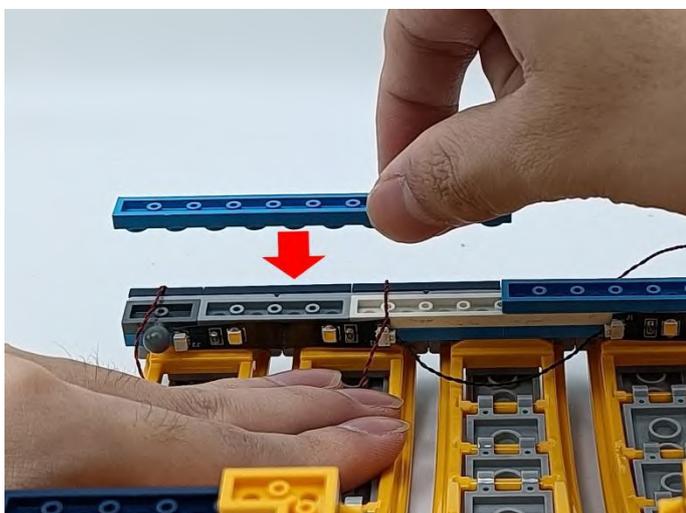
14



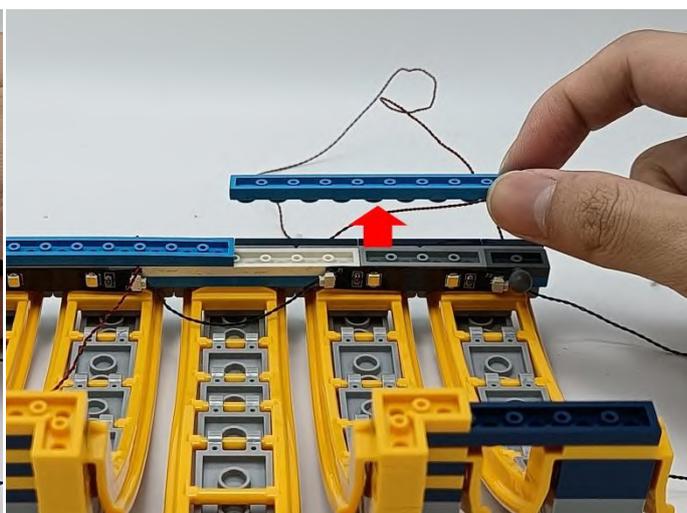
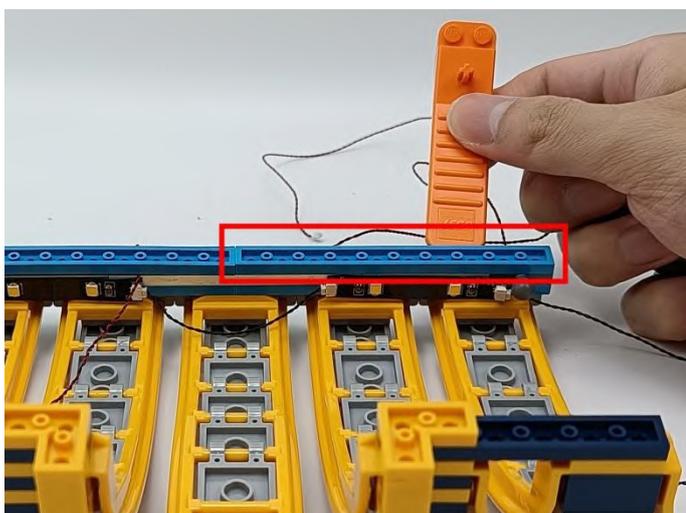
15



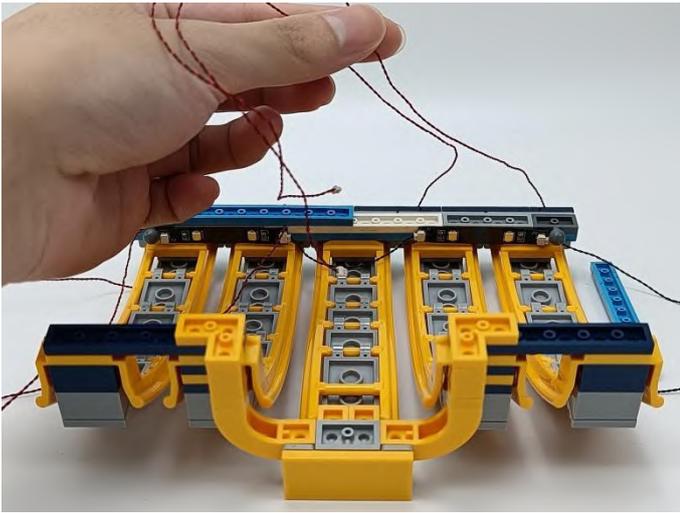
16



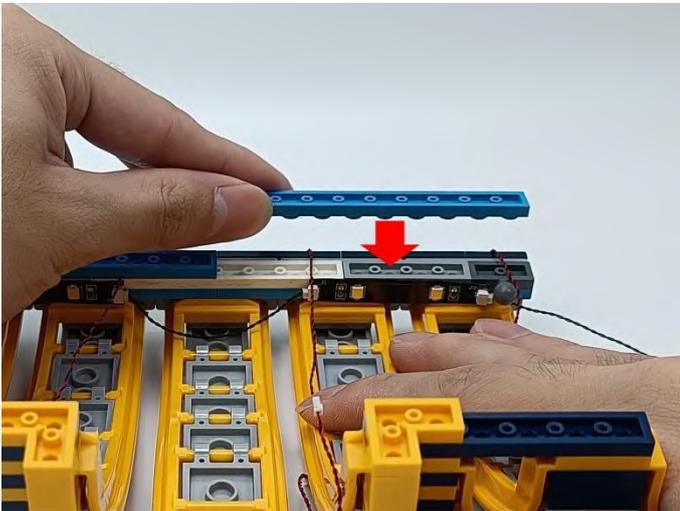
17



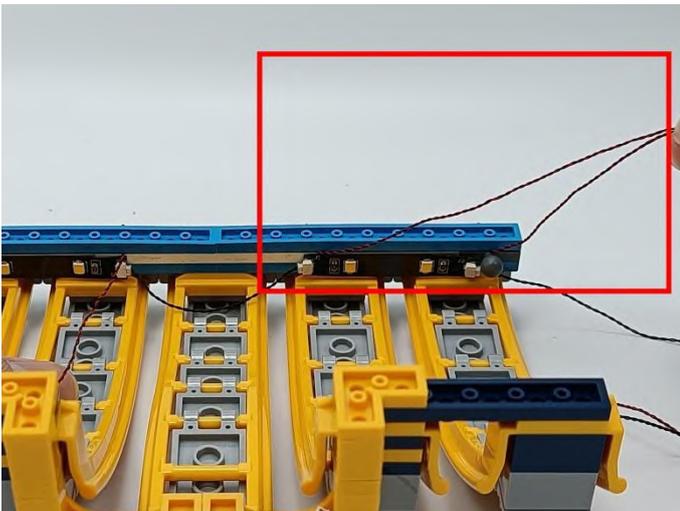
18



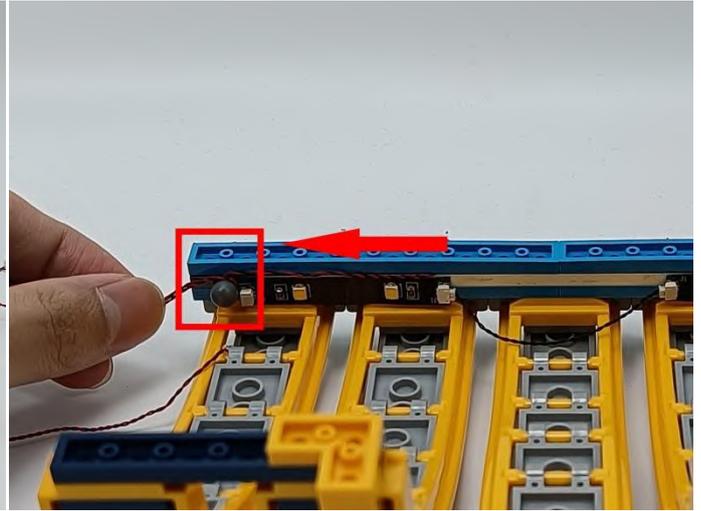
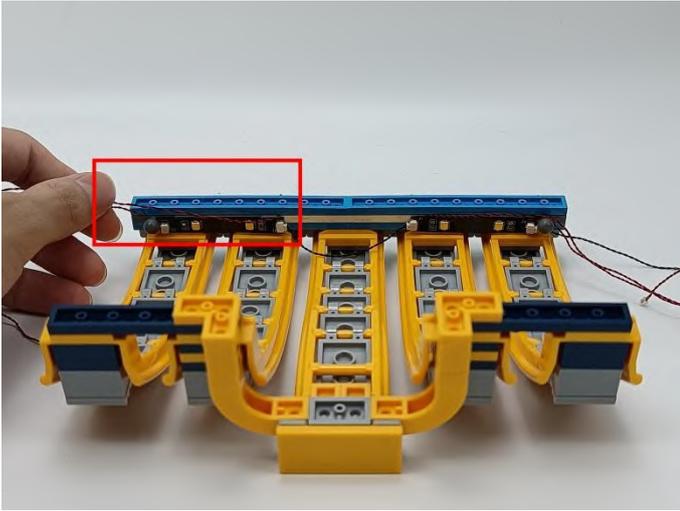
19



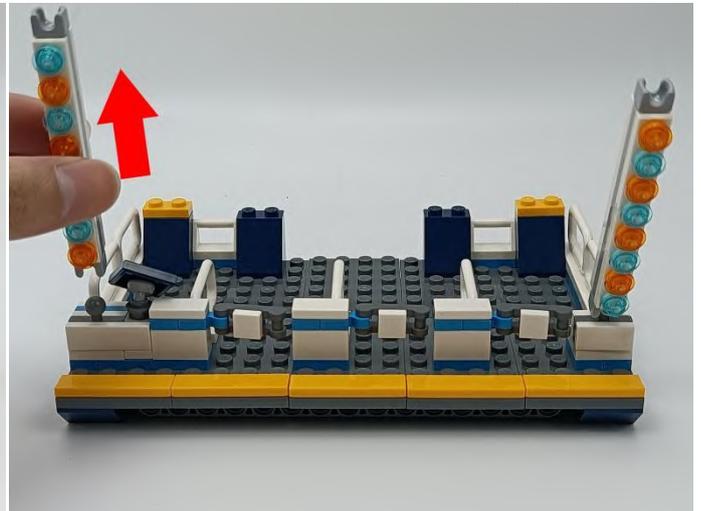
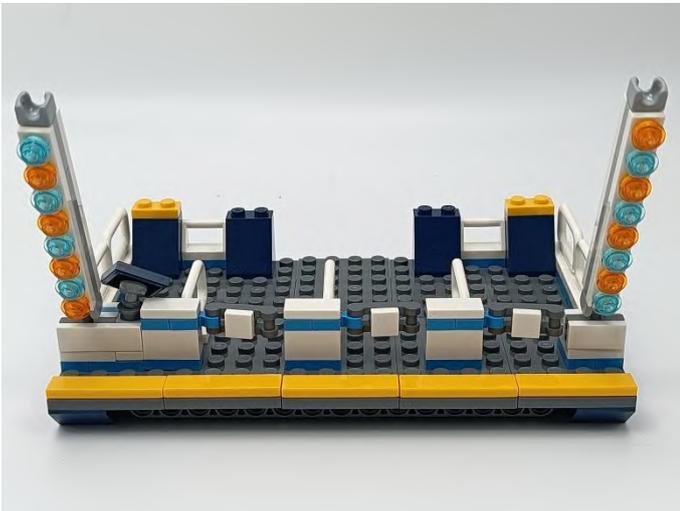
20



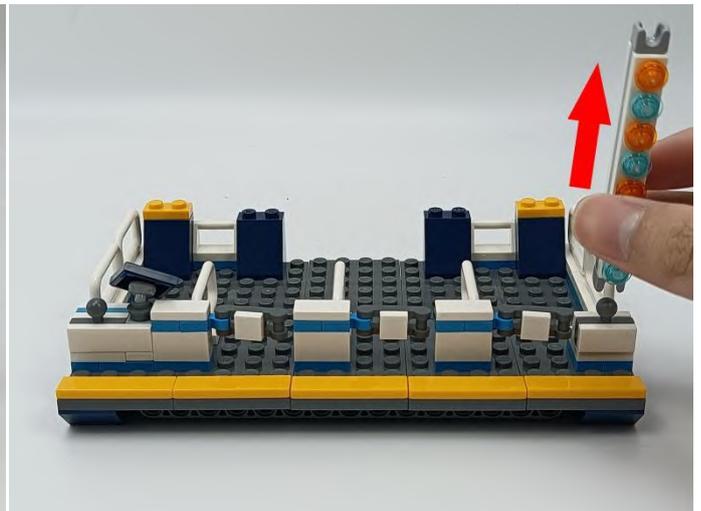
21



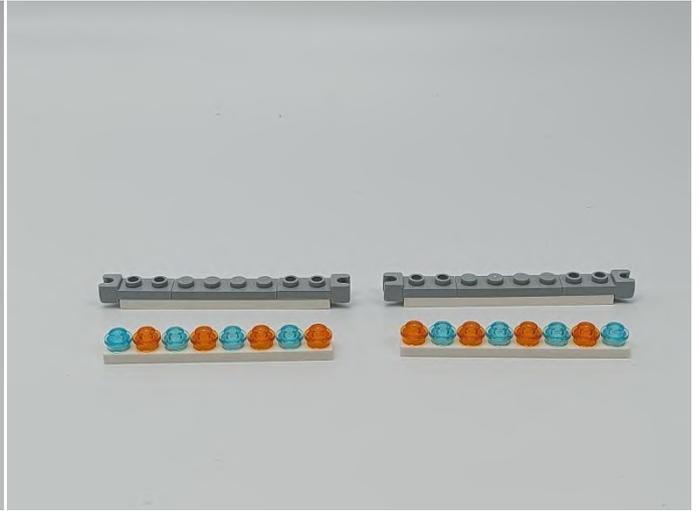
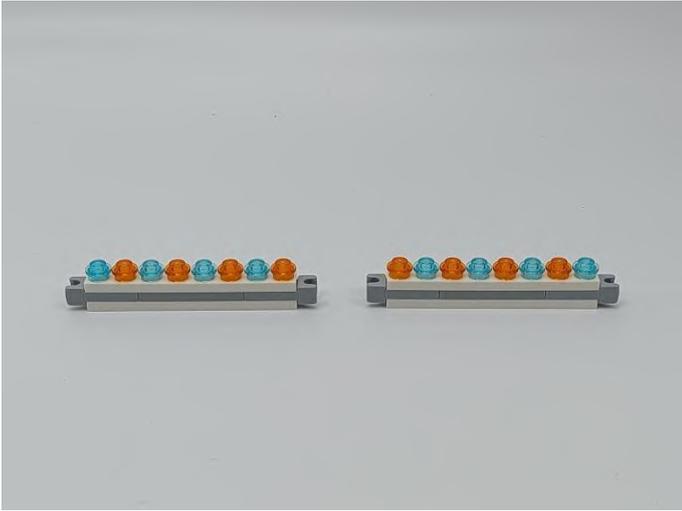
22



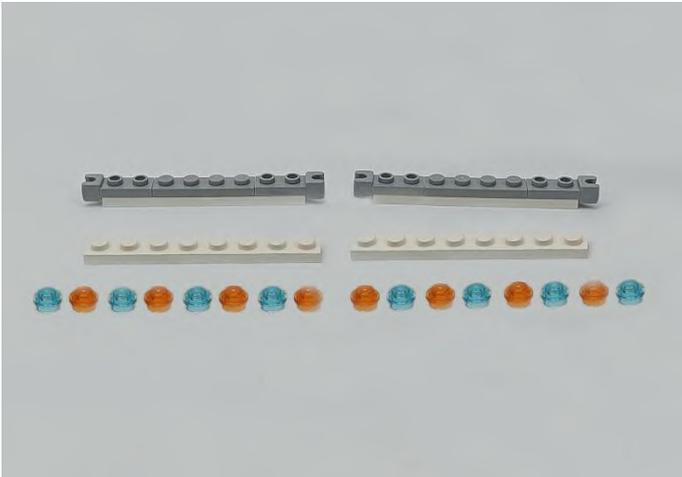
23



24



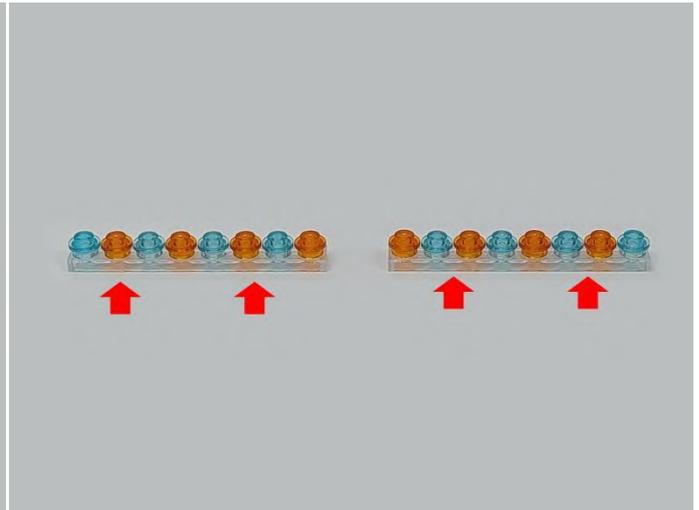
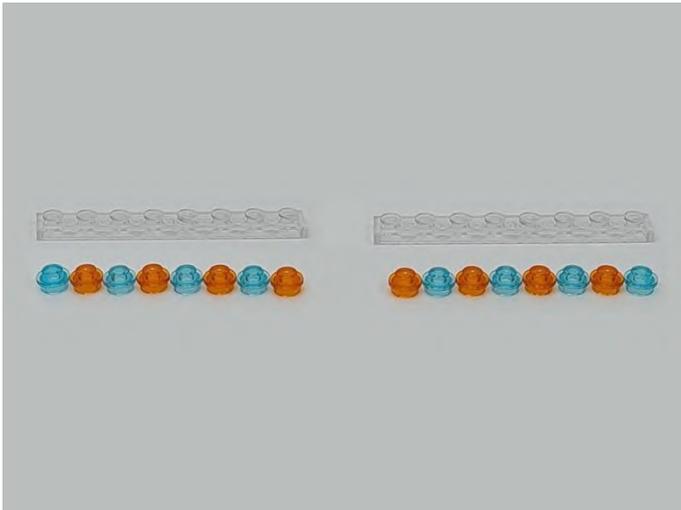
25



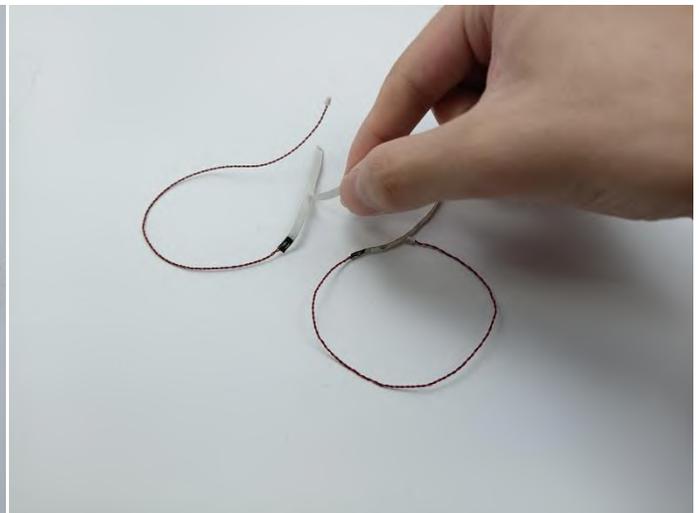
26



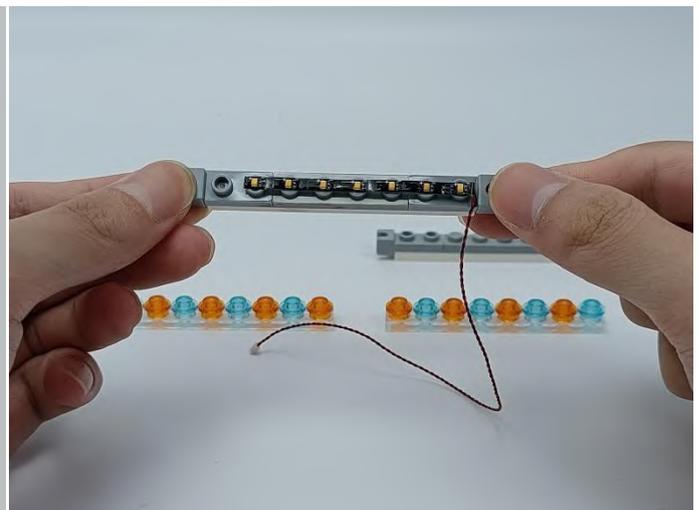
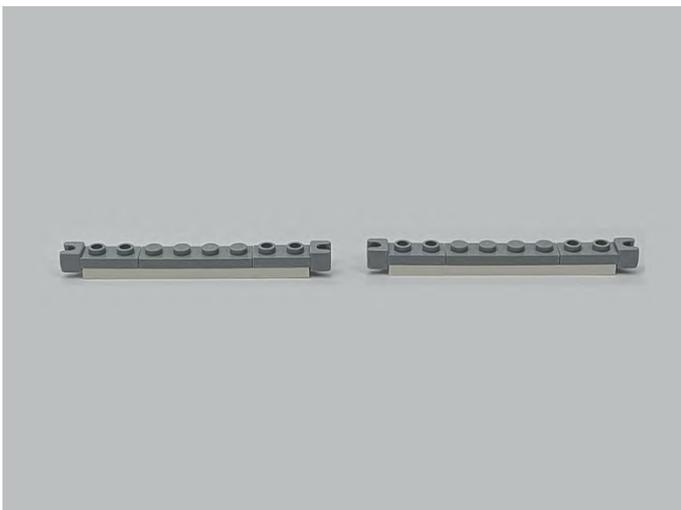
27



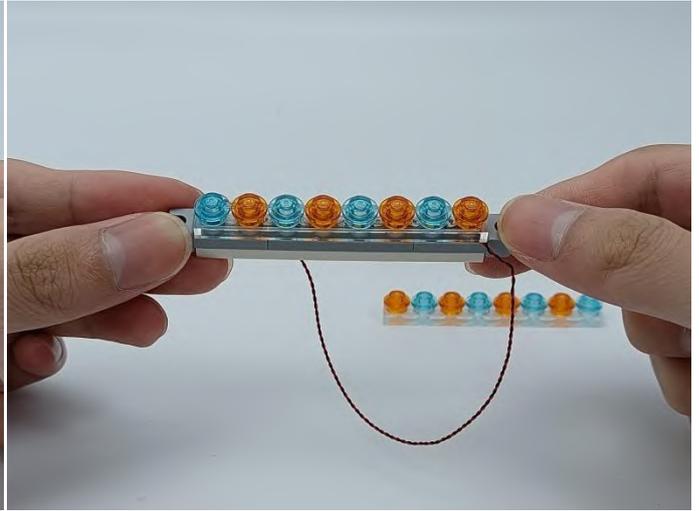
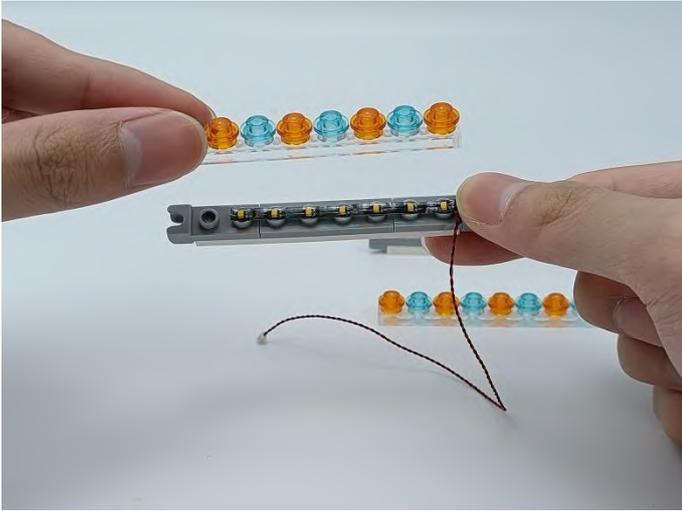
28



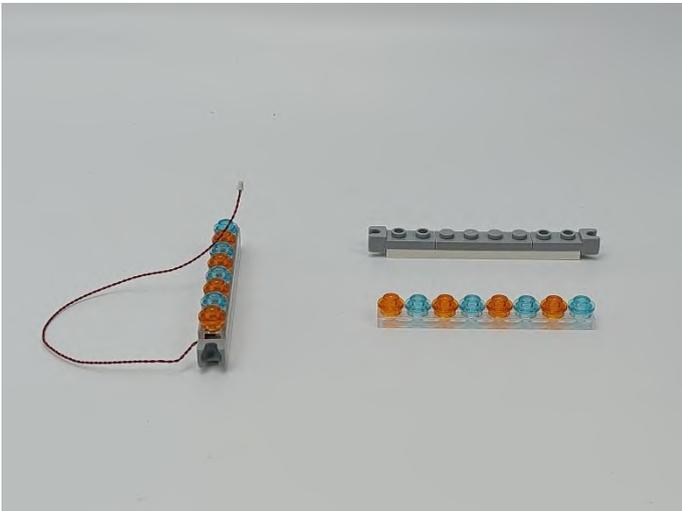
29



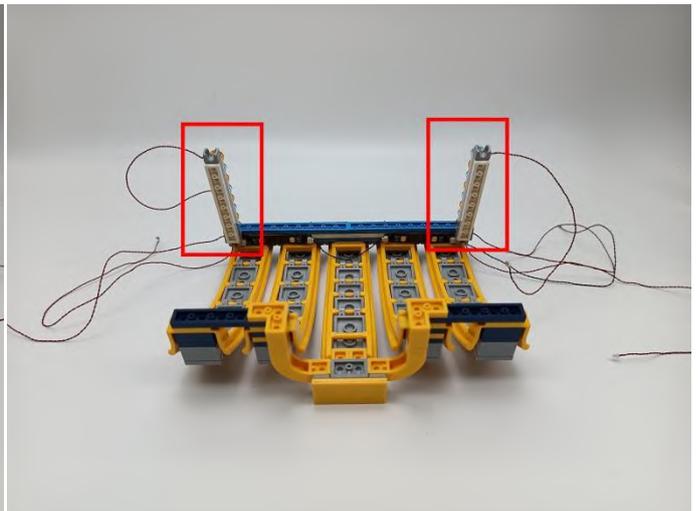
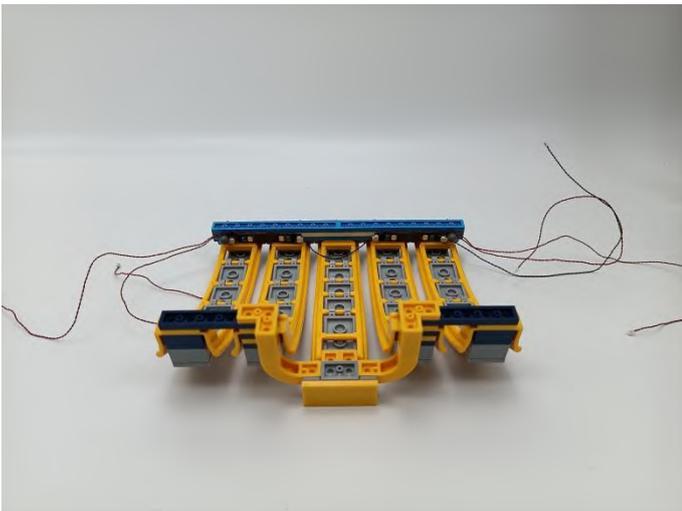
30



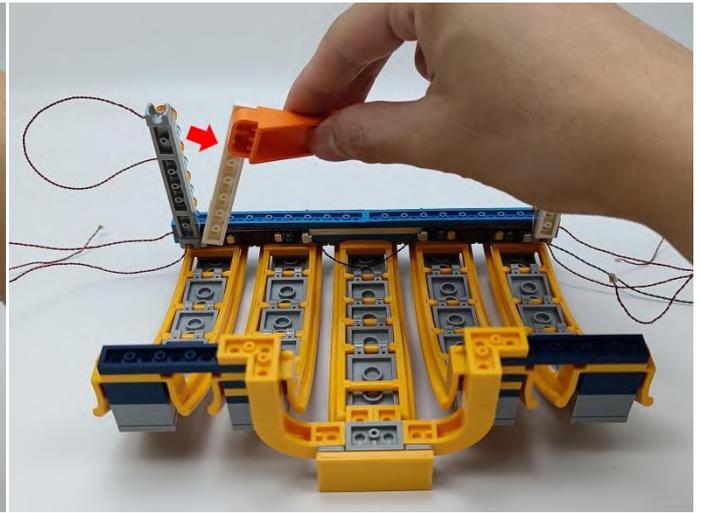
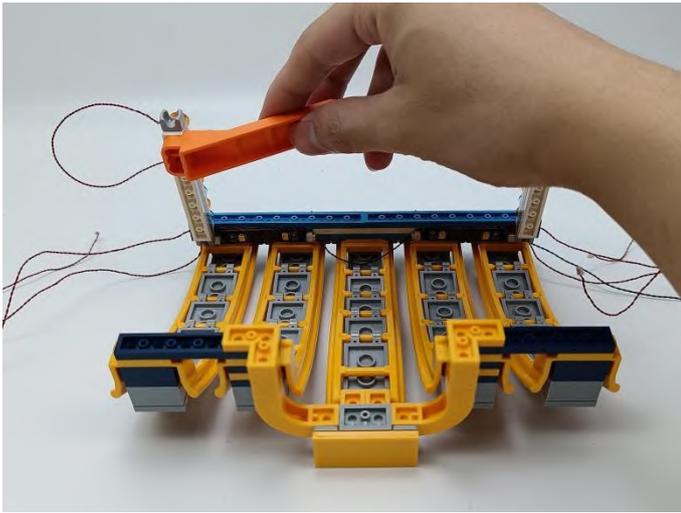
31



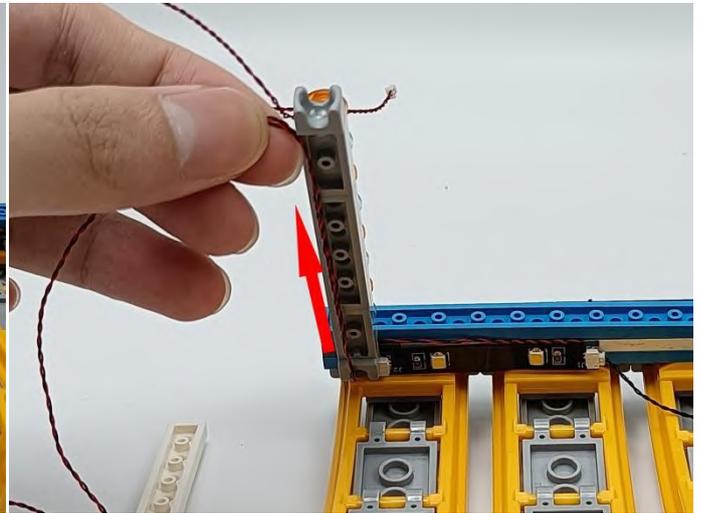
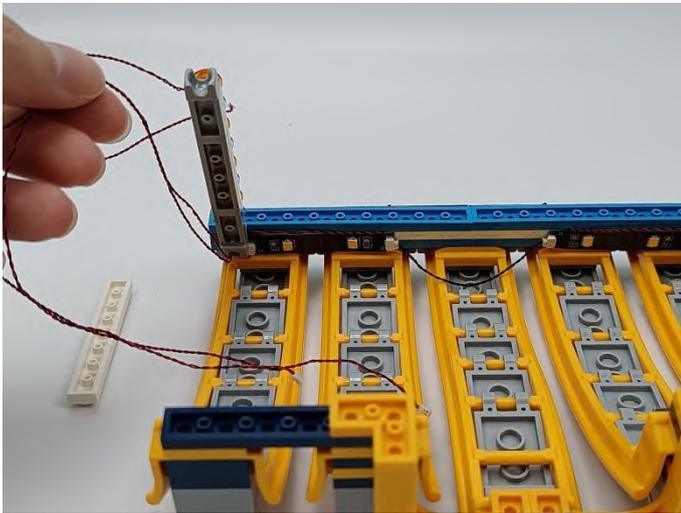
32



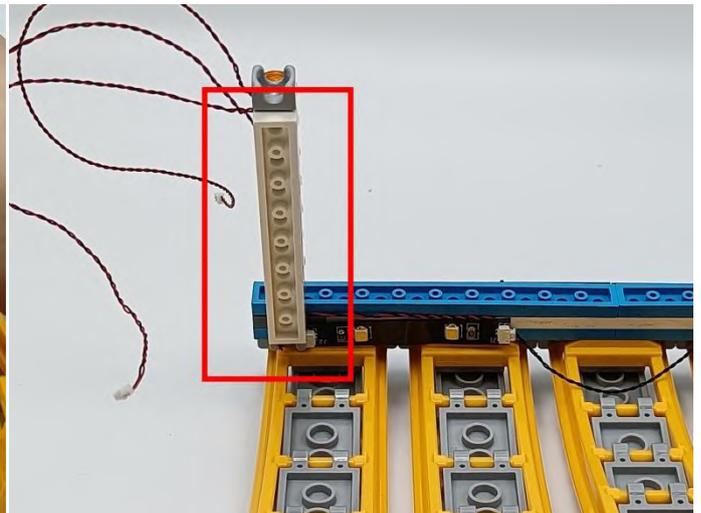
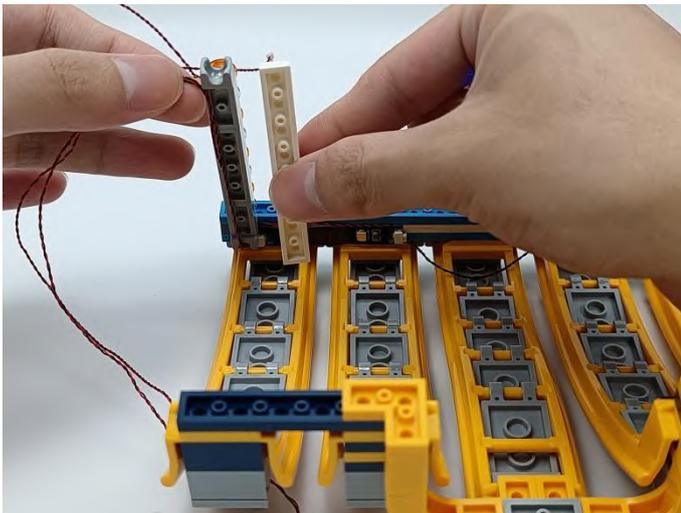
33



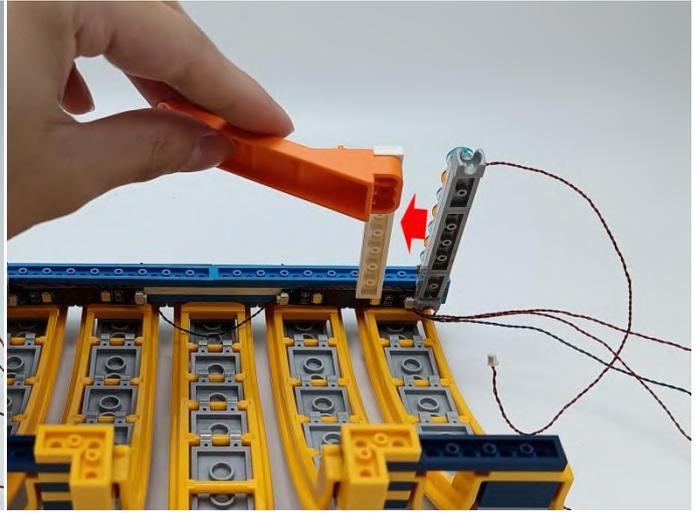
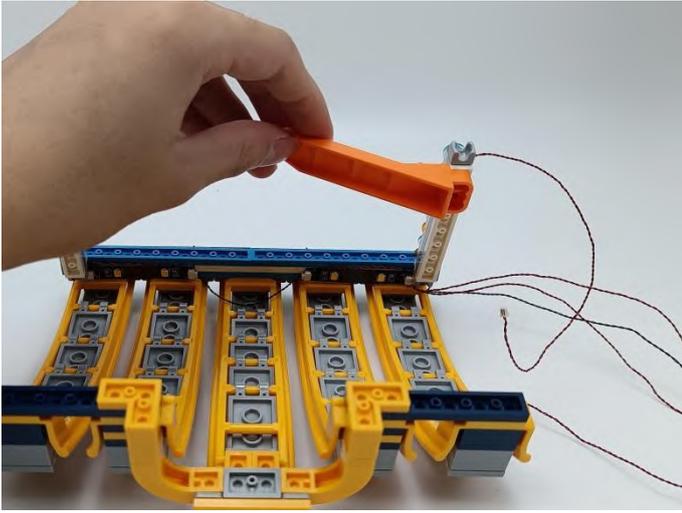
34



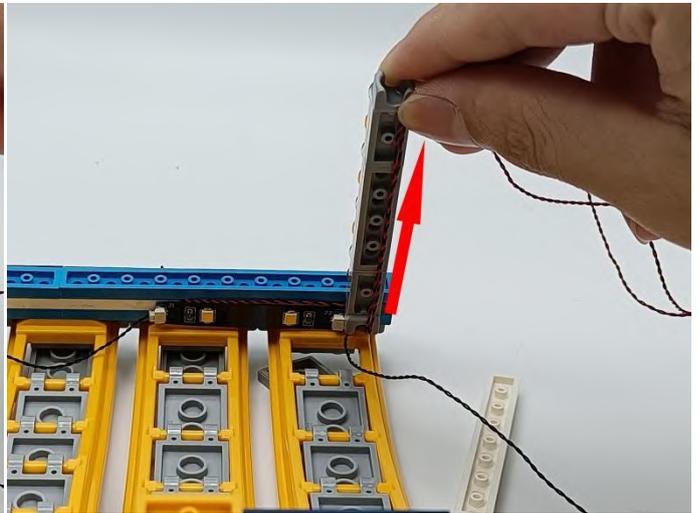
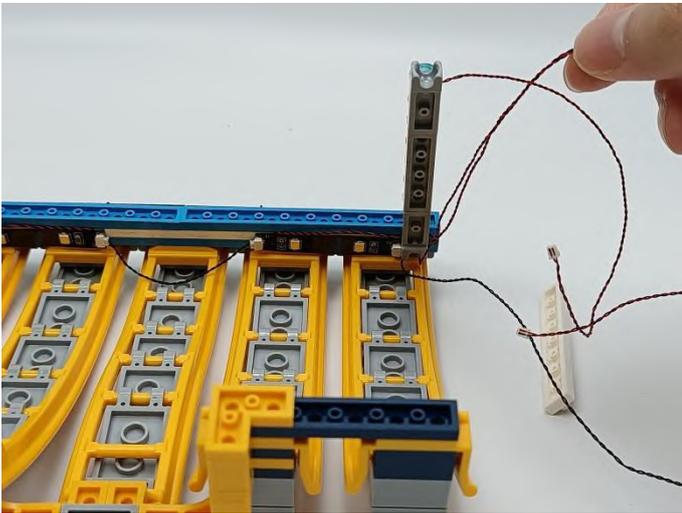
35



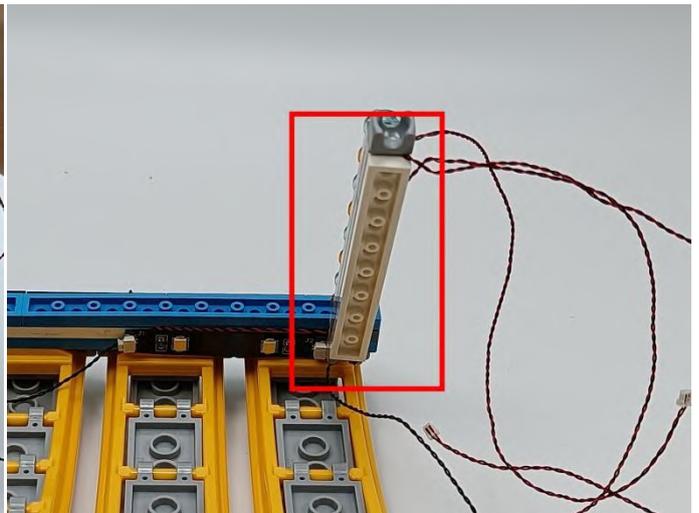
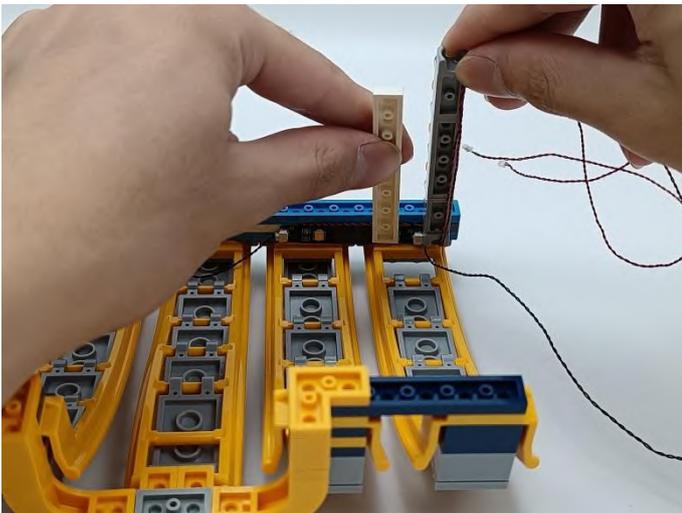
36



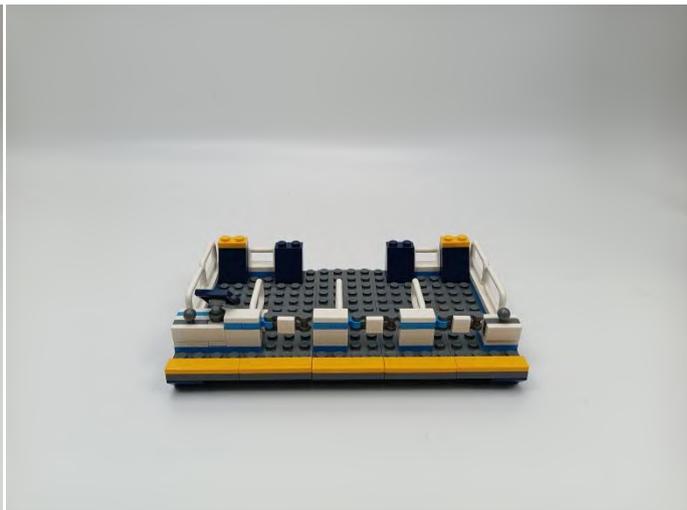
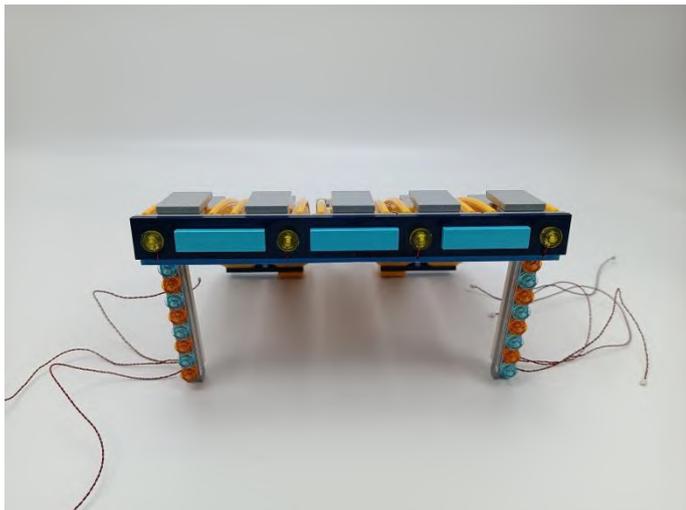
37



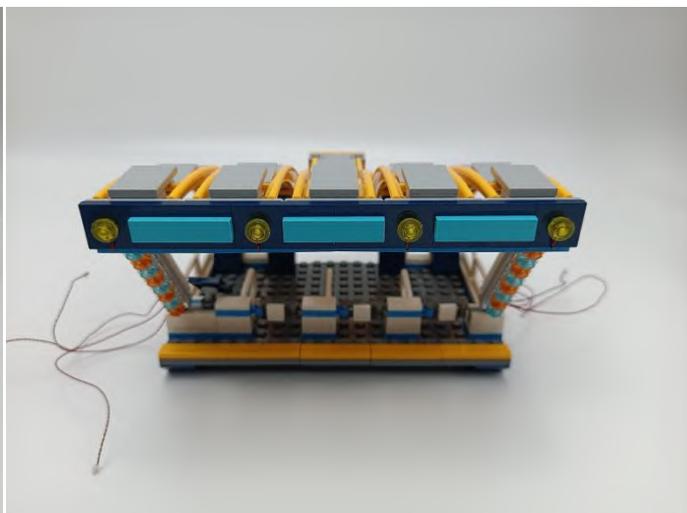
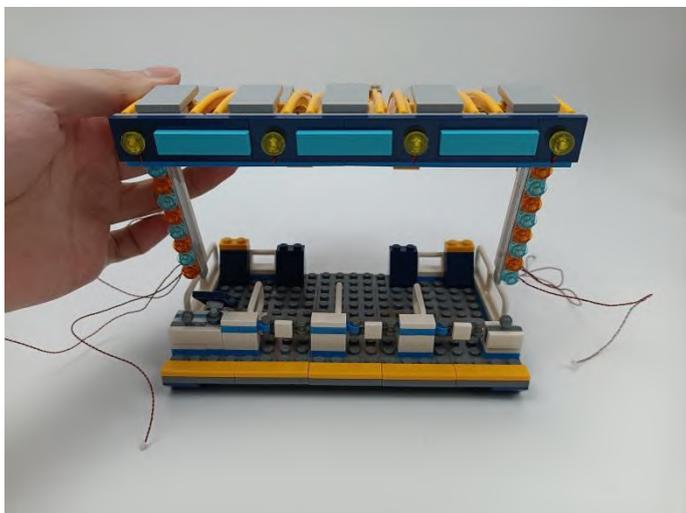
38



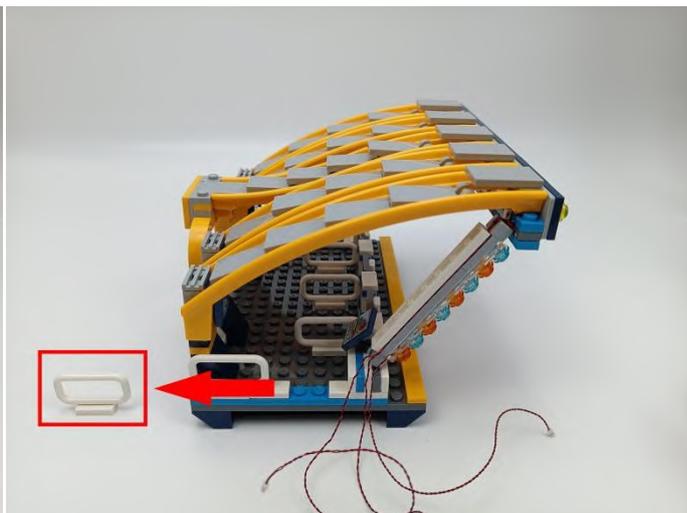
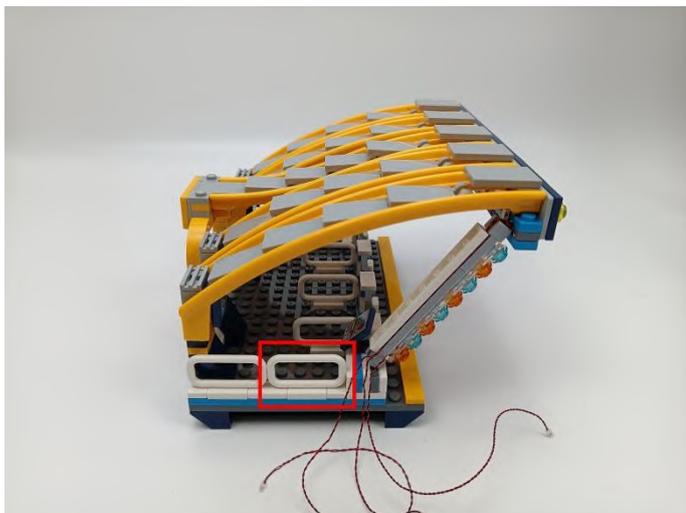
39



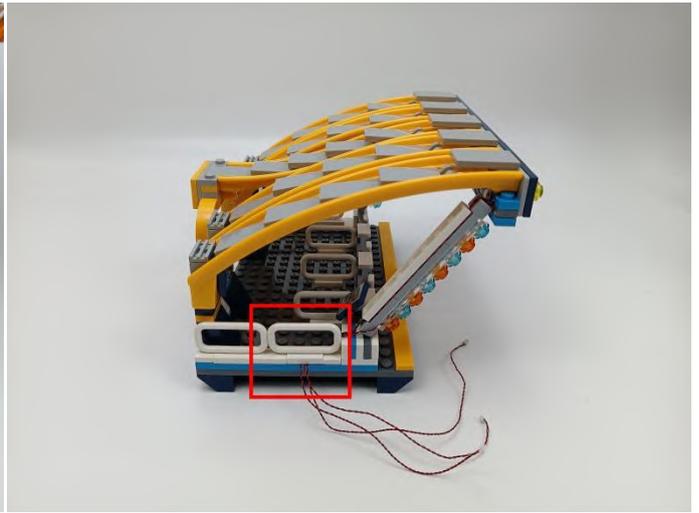
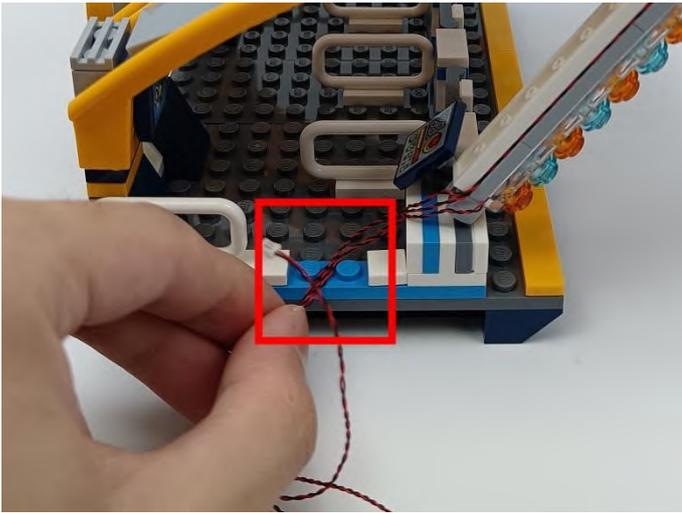
40



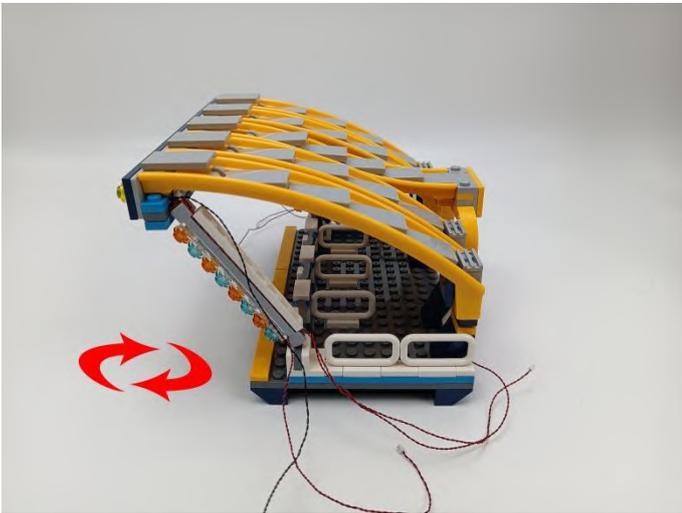
41



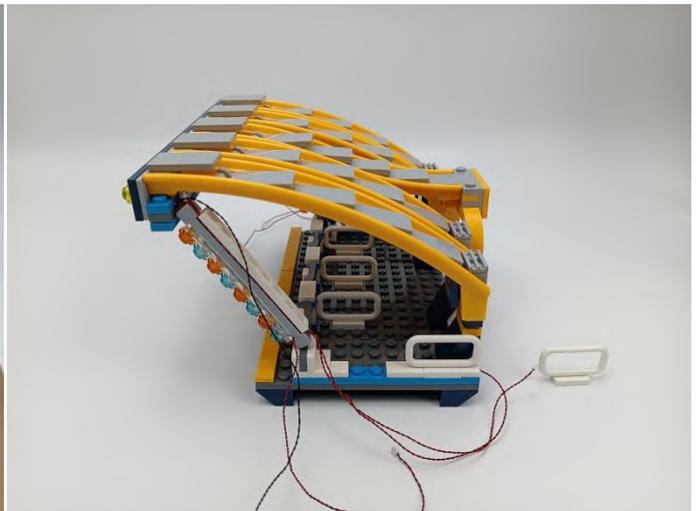
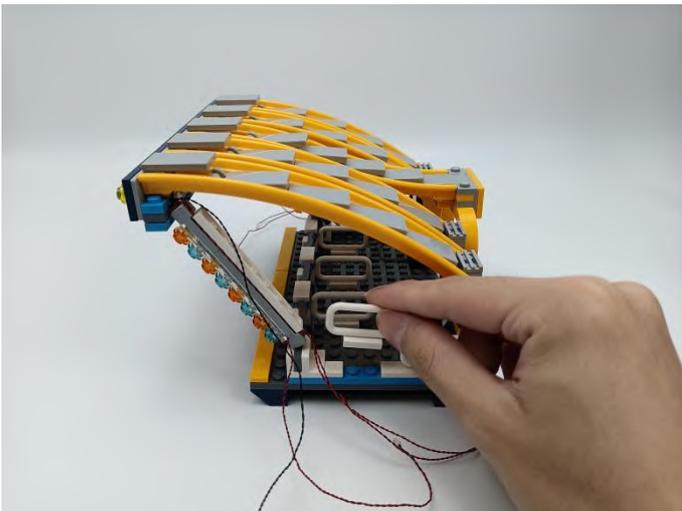
42



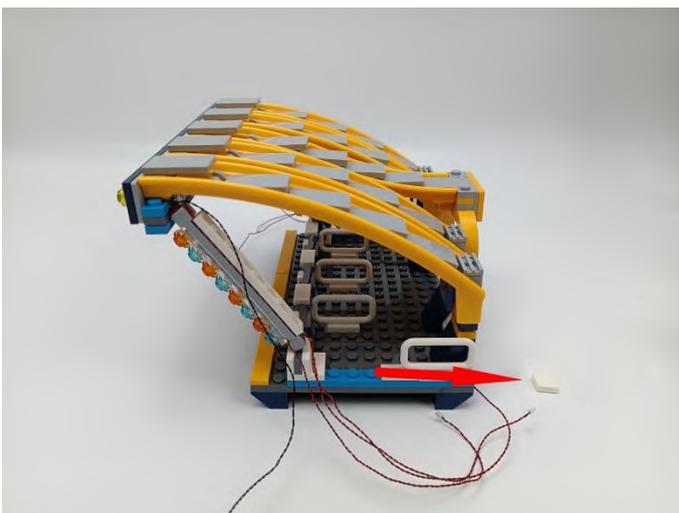
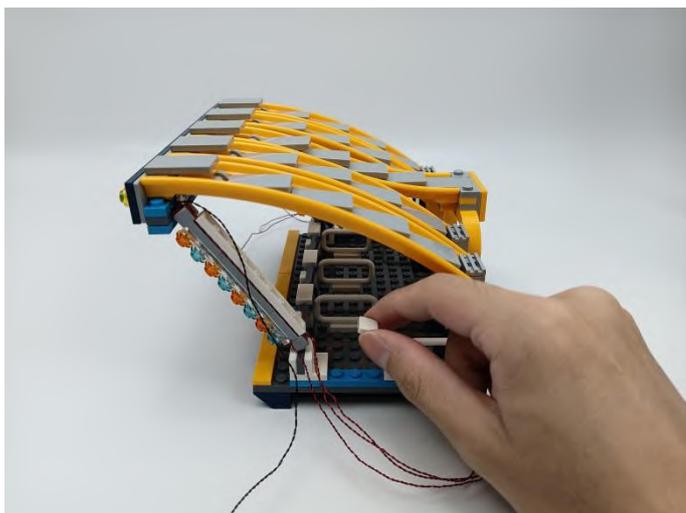
43



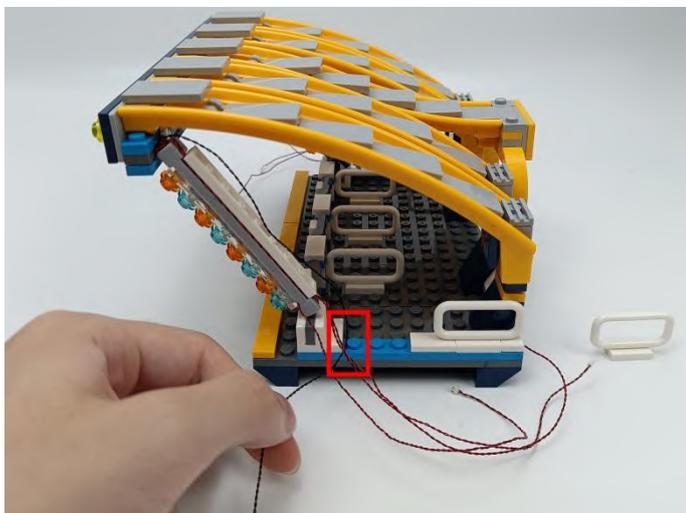
44



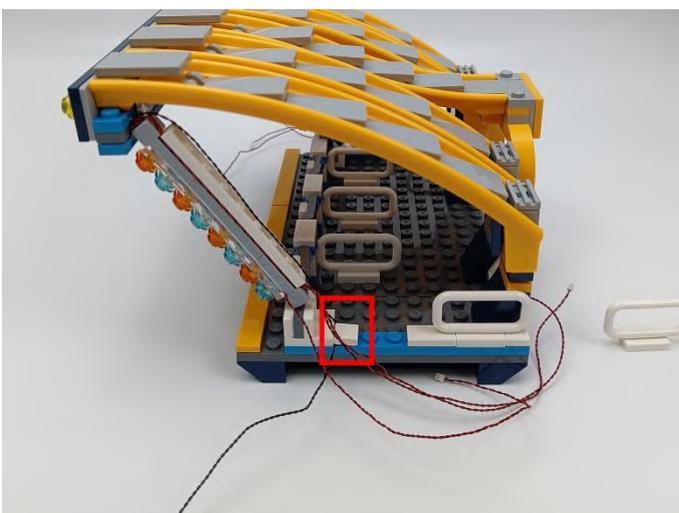
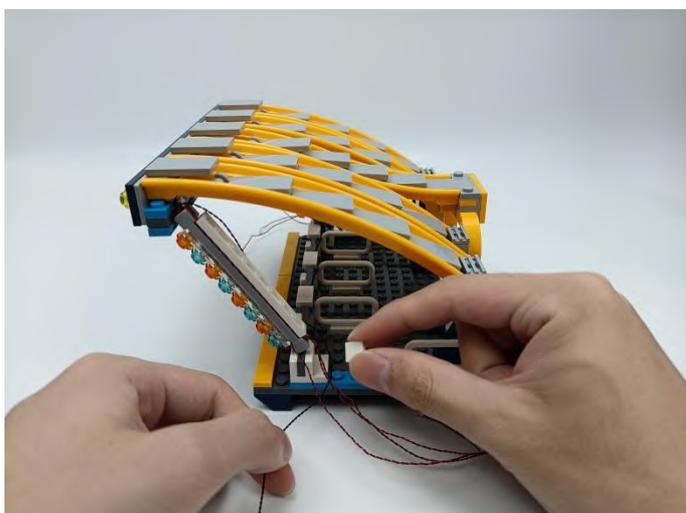
45



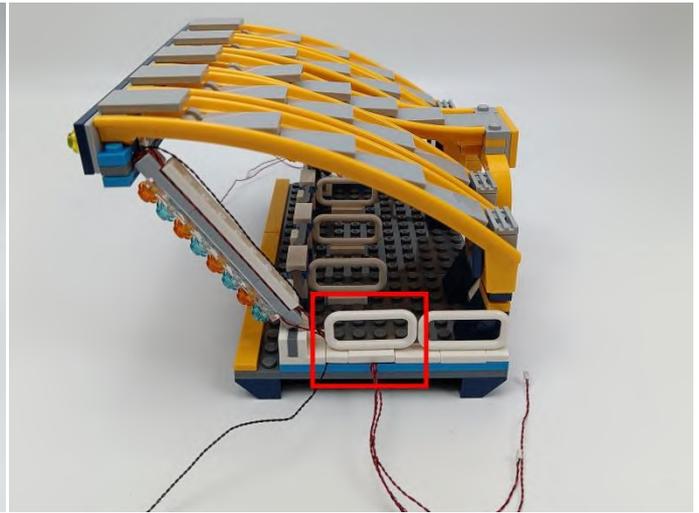
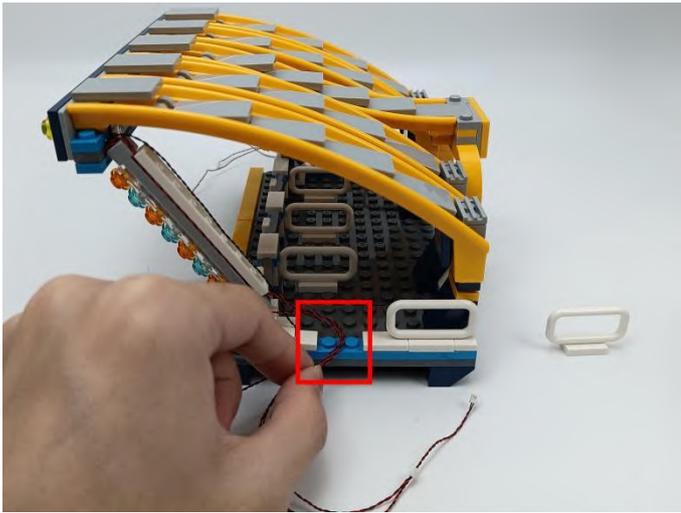
46



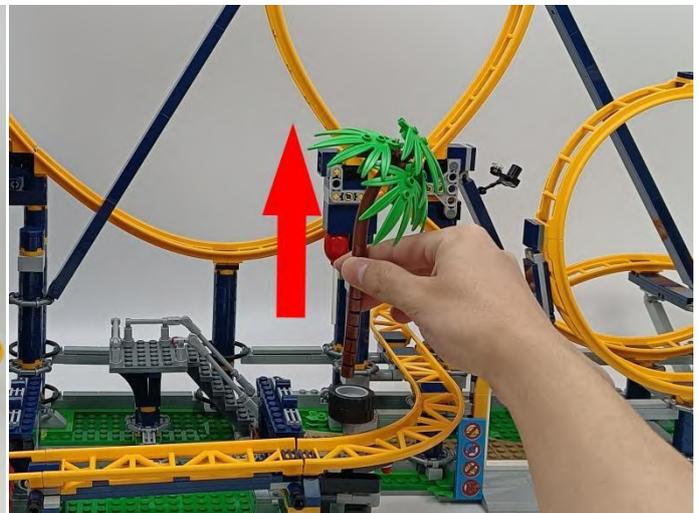
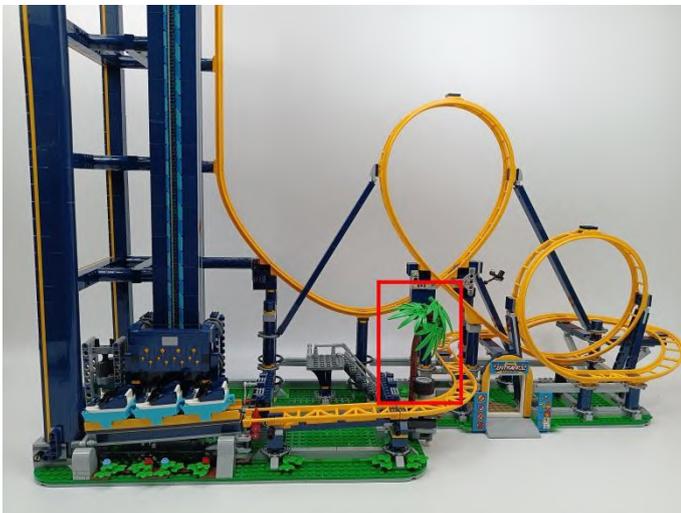
47



48



49



50



51



52

## 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:

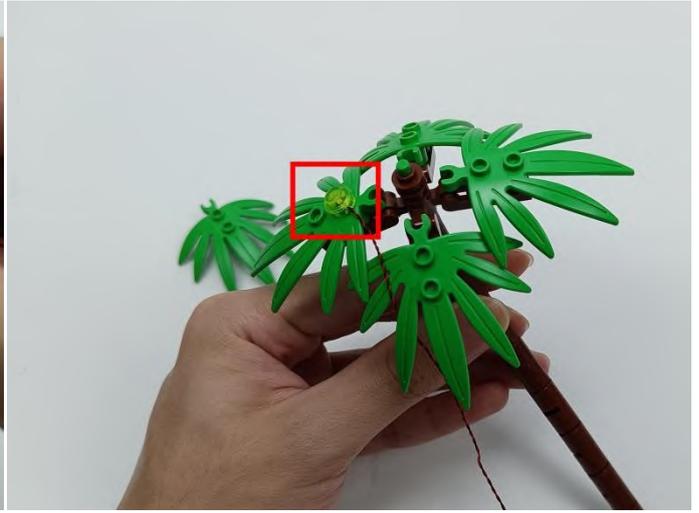
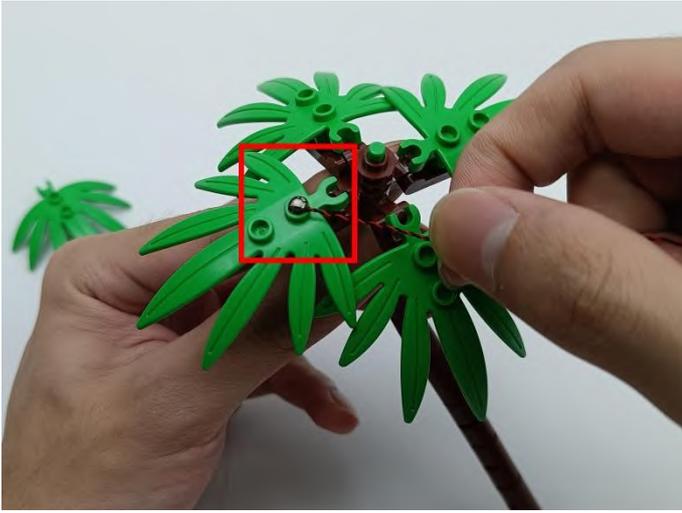
### The plate with slit:

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

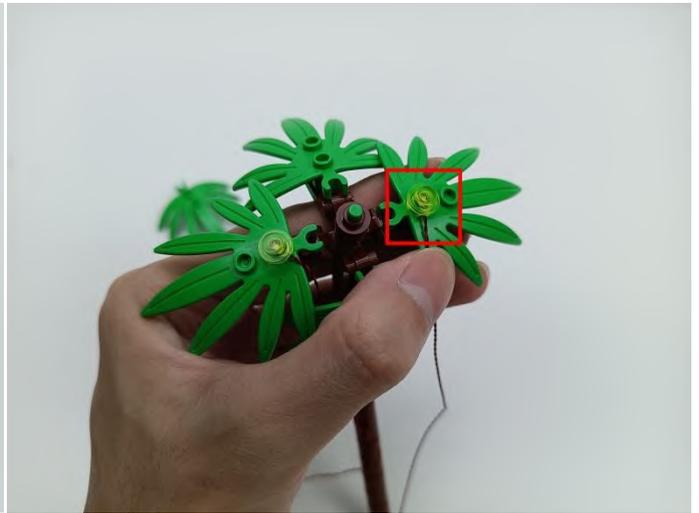


The slit on the the plate round 1X1 are hand-made to avoid squeeze the wire and cause short circuit and abnormalheat during installation.

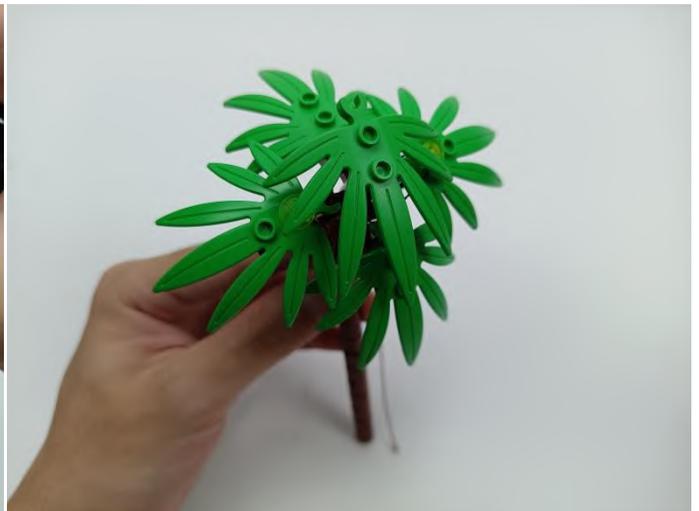
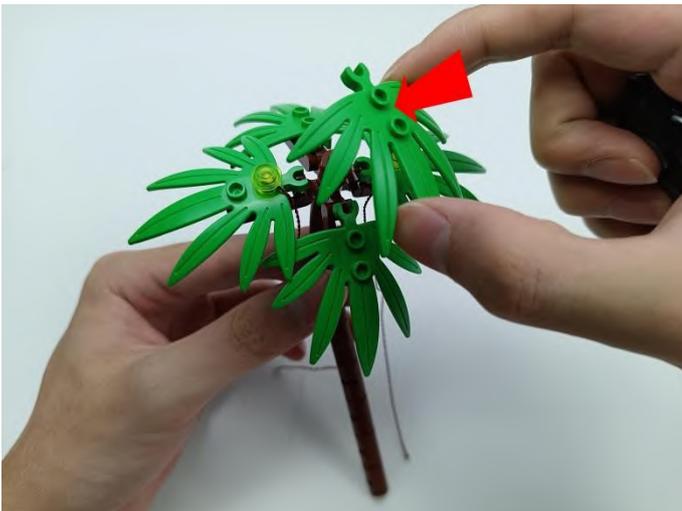
53



54



55



56



57



58



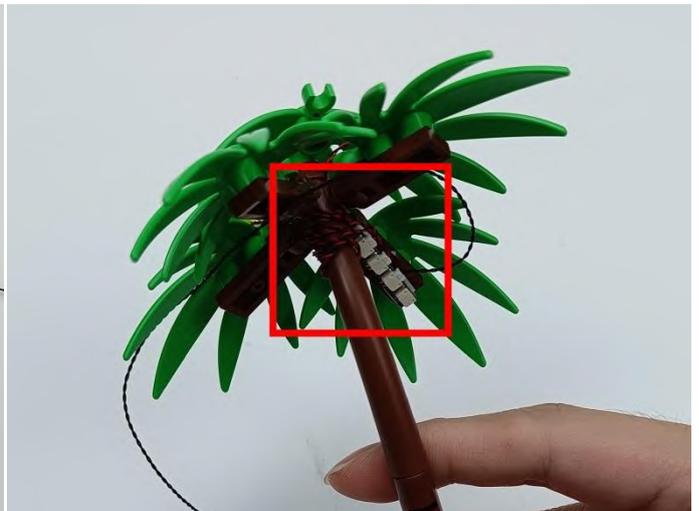
59



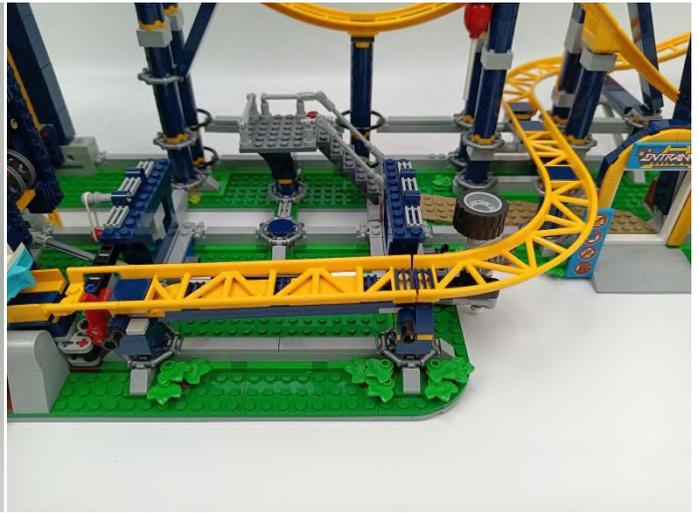
60



61



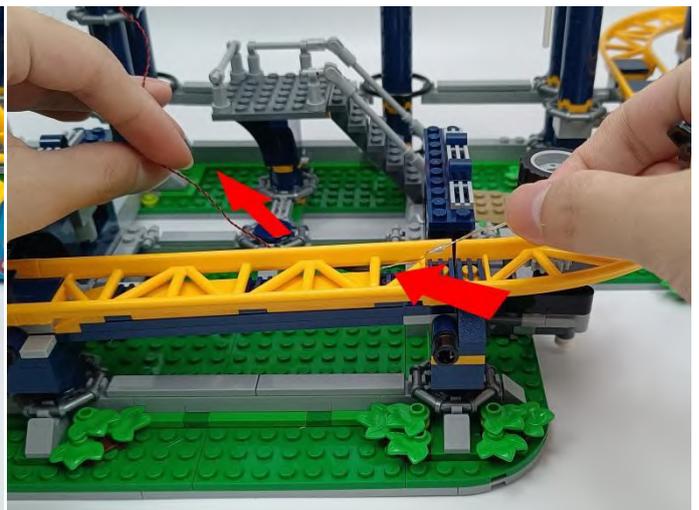
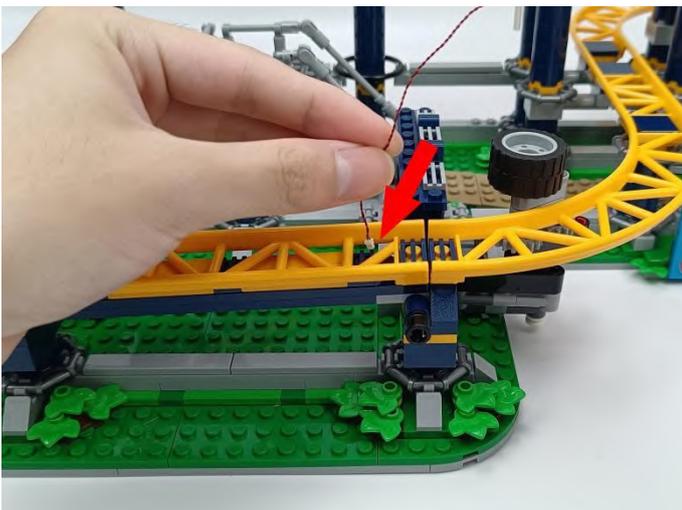
62

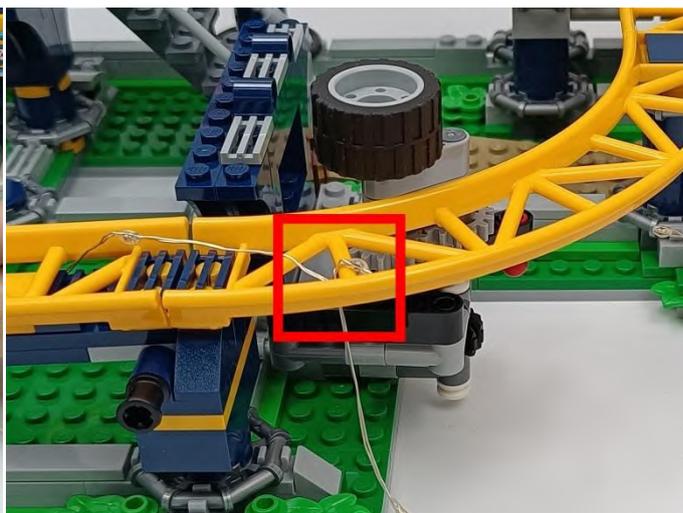
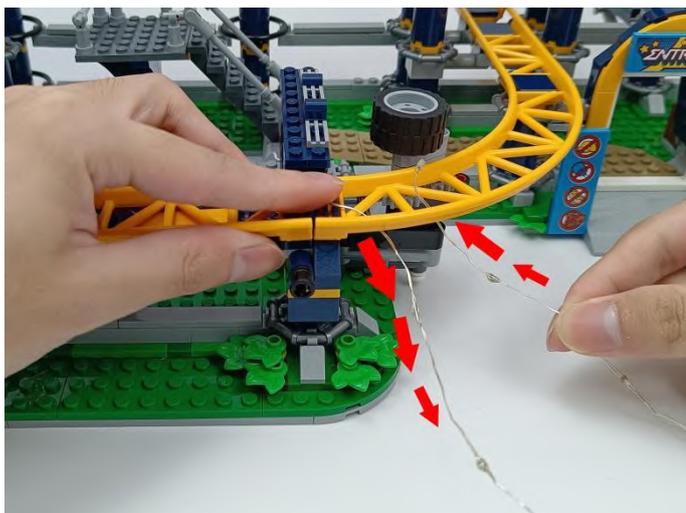


63

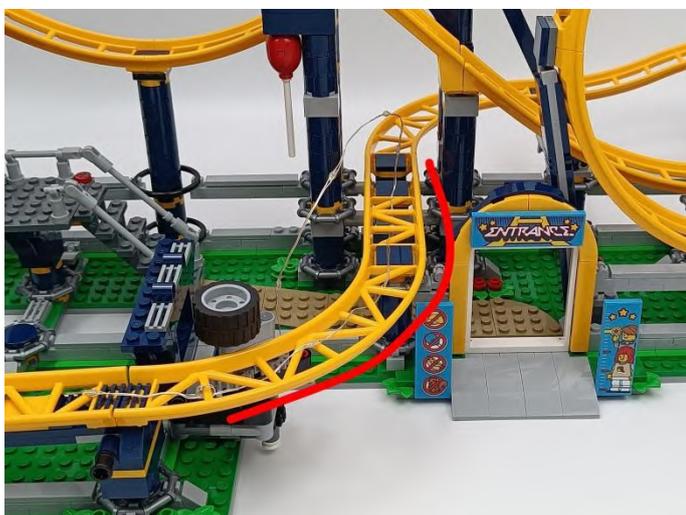


64

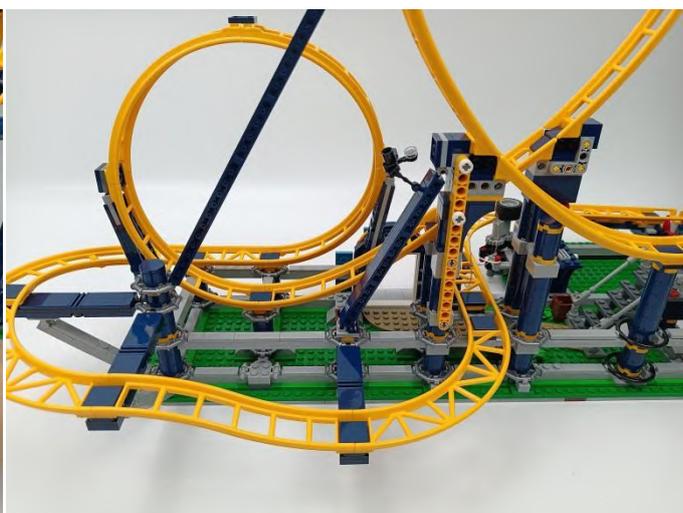
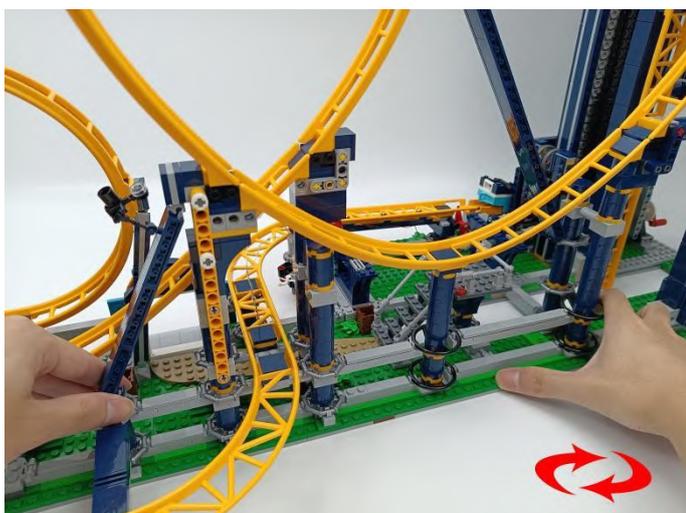




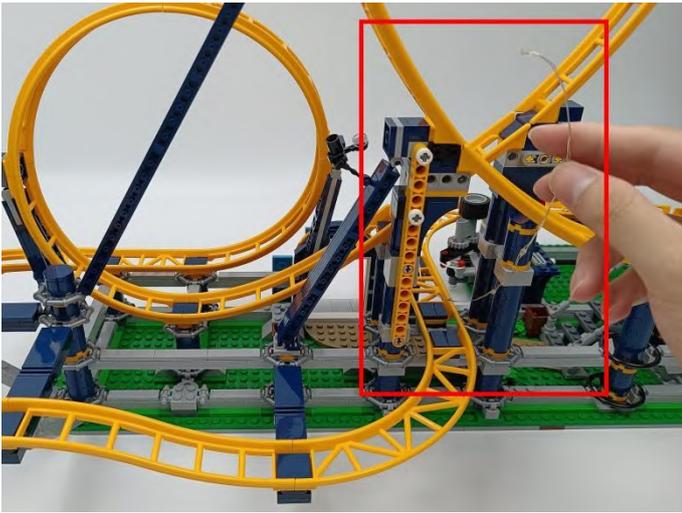
**Wrap the lighting cord around the track.**



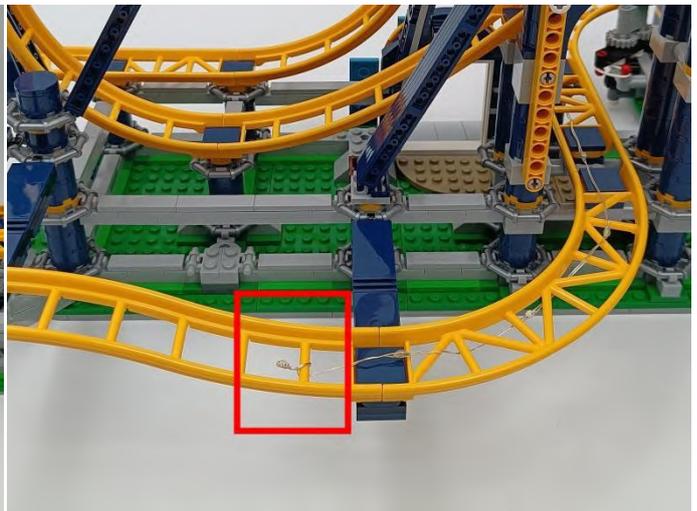
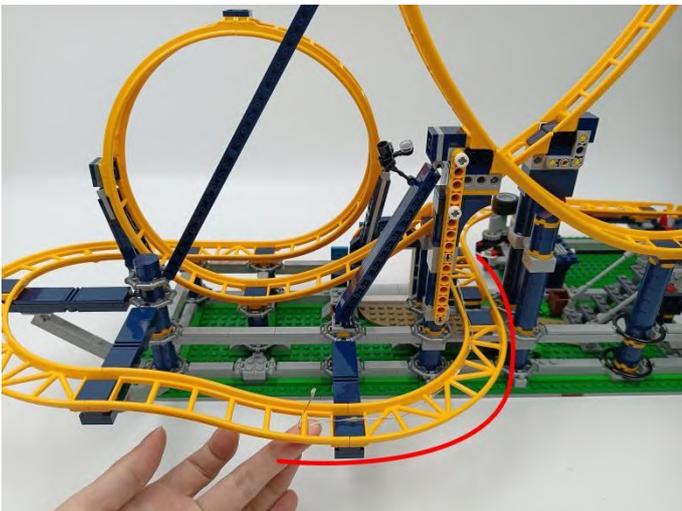
**Rotate the model to the other side.**



**Find the lighting wire just now.**



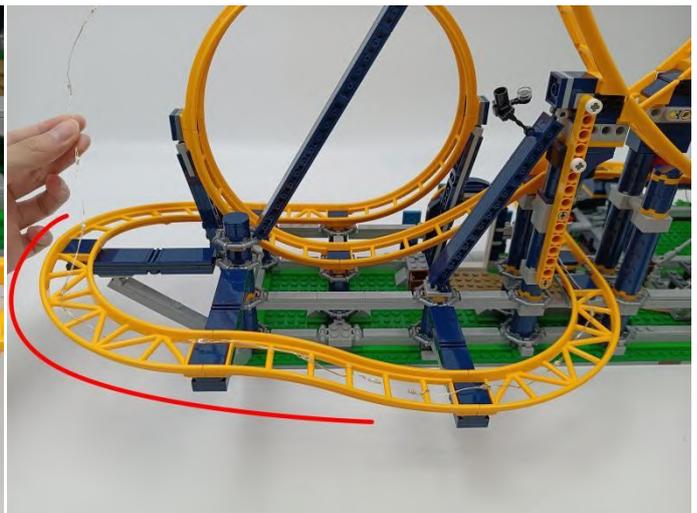
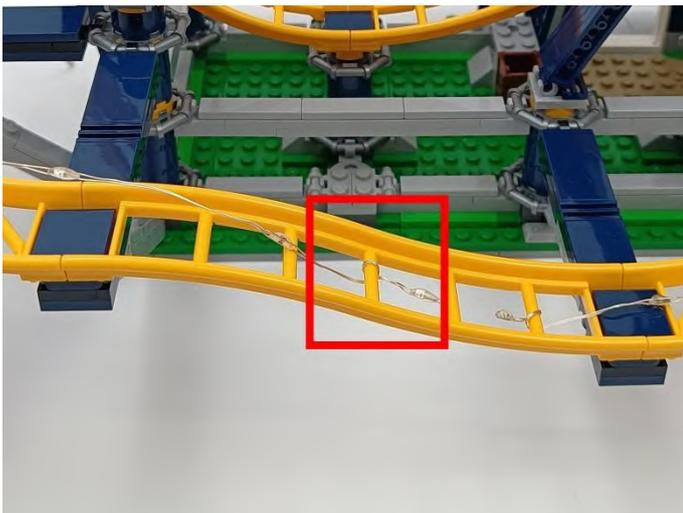
**Wrap the lighting wire around the track. And fasten the tail to the track.**



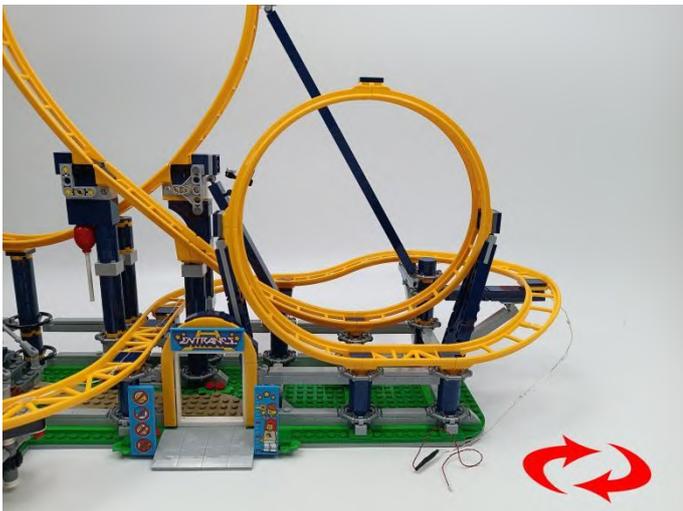
**66**



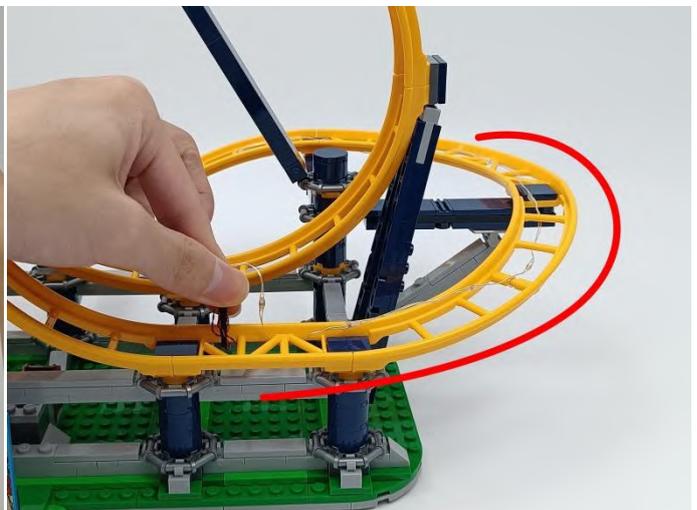
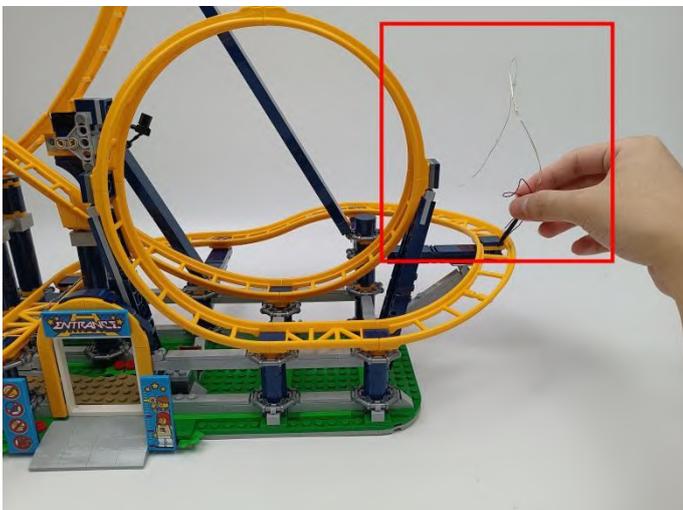
**Secure the tail to the track. And wrap the rest of the lighting wire around the track.**



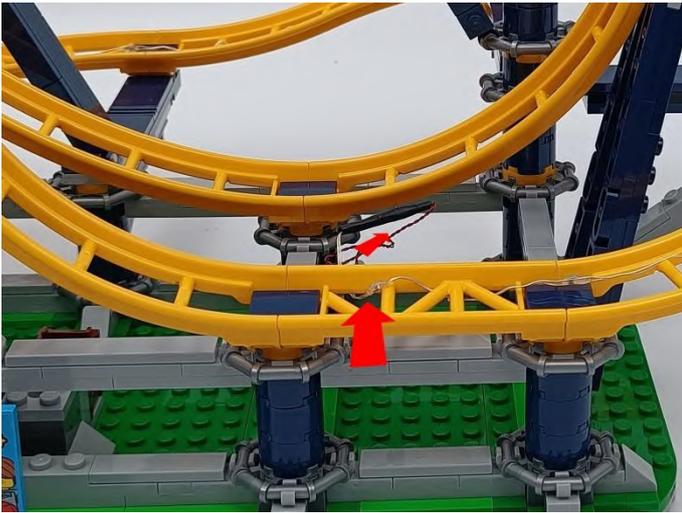
**Rotate the model to the other side.**



**Find the lighting wire just now. put it on the track.**



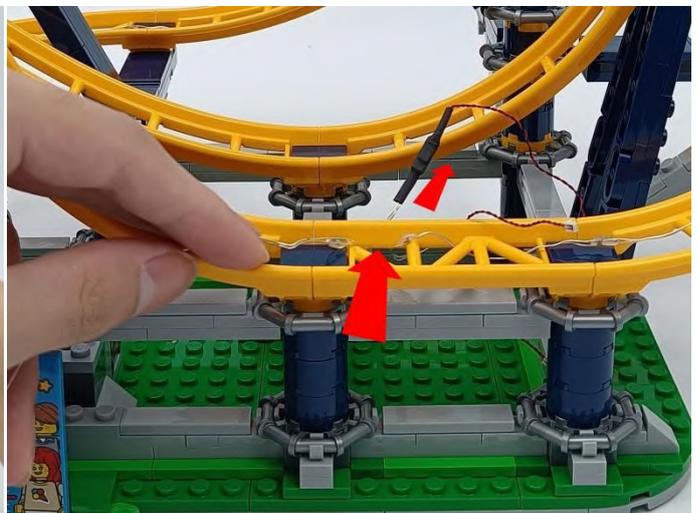
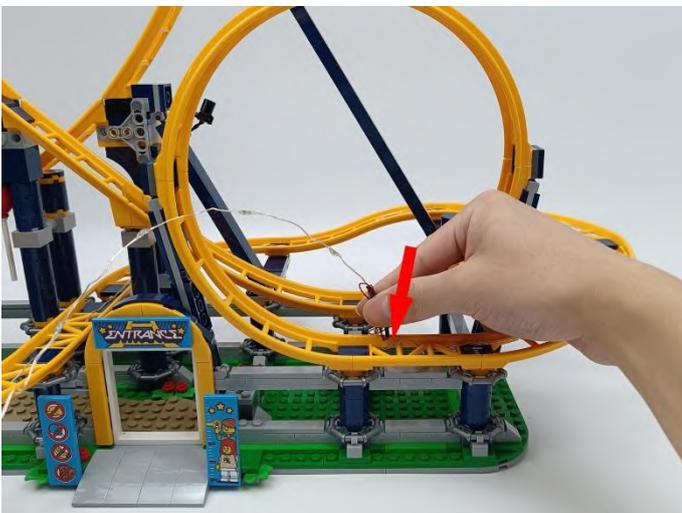
**Thread the black portion of the lighting wire out of the track.**



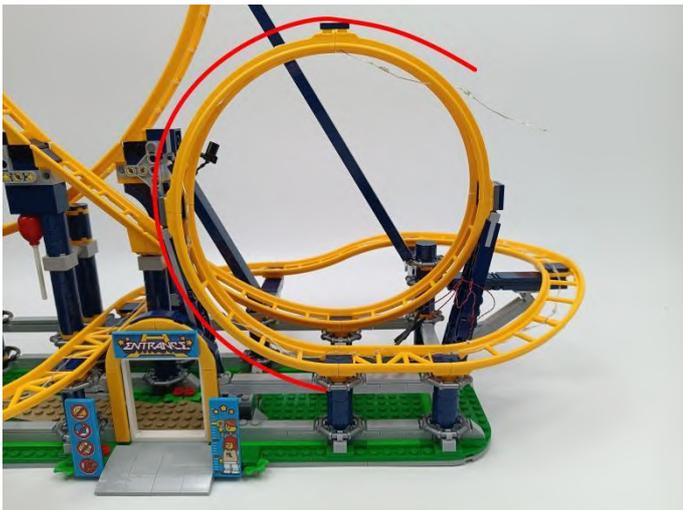
**67**



**Thread the black part of the lighting wire from where it was just now to the outside of the track.**



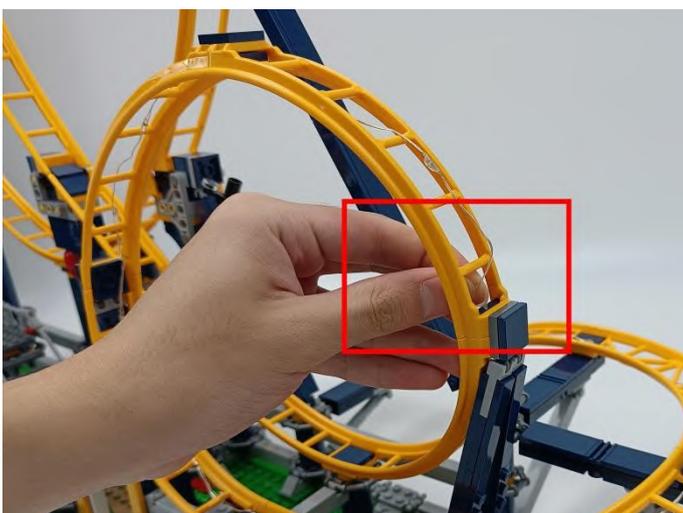
**Wrap the rest of the lighting wire around the track.**



**Rotate to the side.**

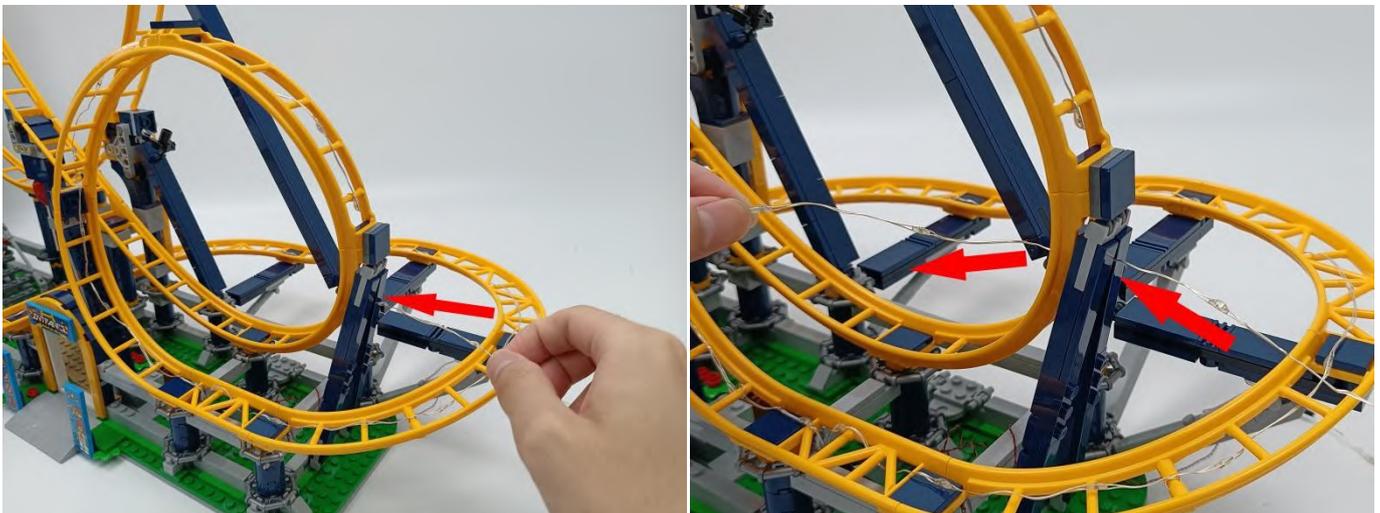


**Fasten the tail of the lighting wire to the track.**

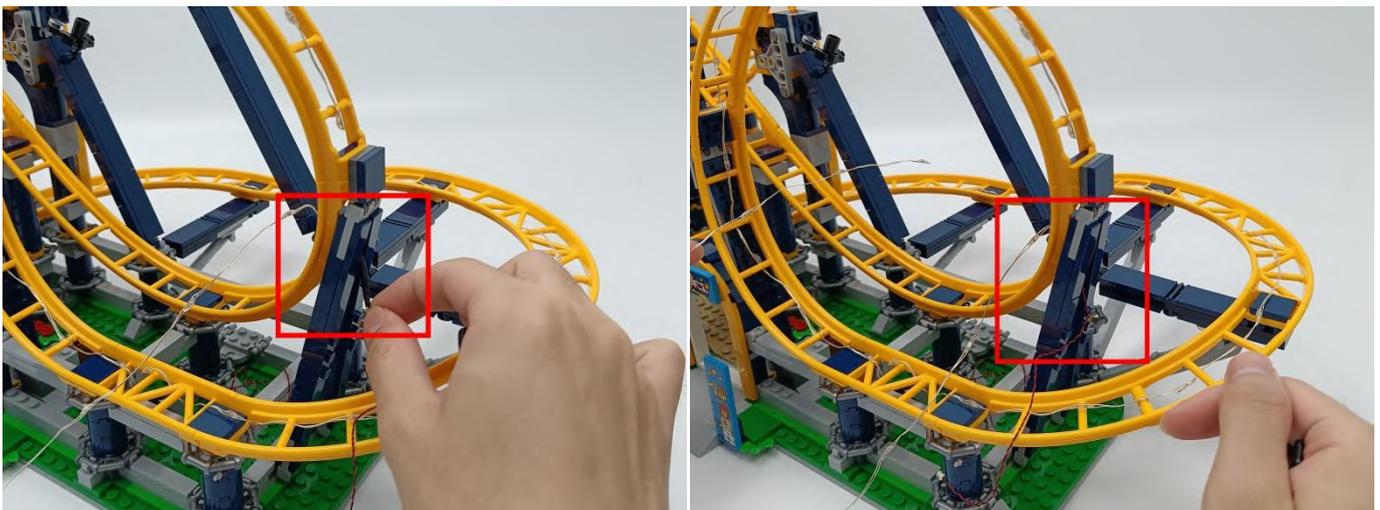




**Pass the tail of the lighting wire through the slit in the picture.**



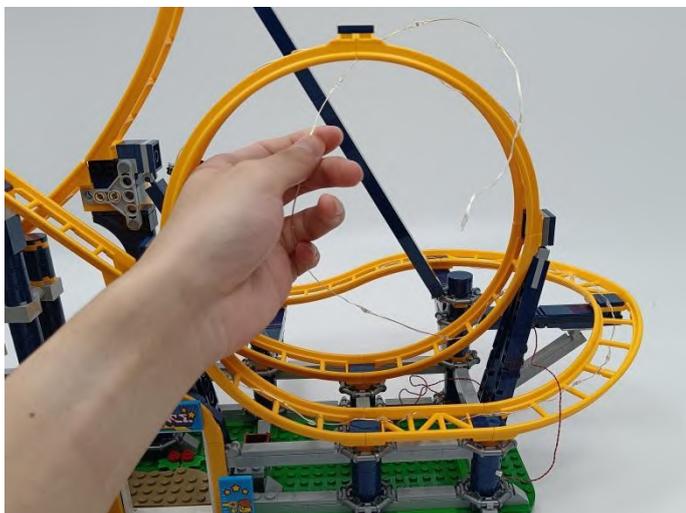
**Snap the black part of the lighting wire into the gap.**



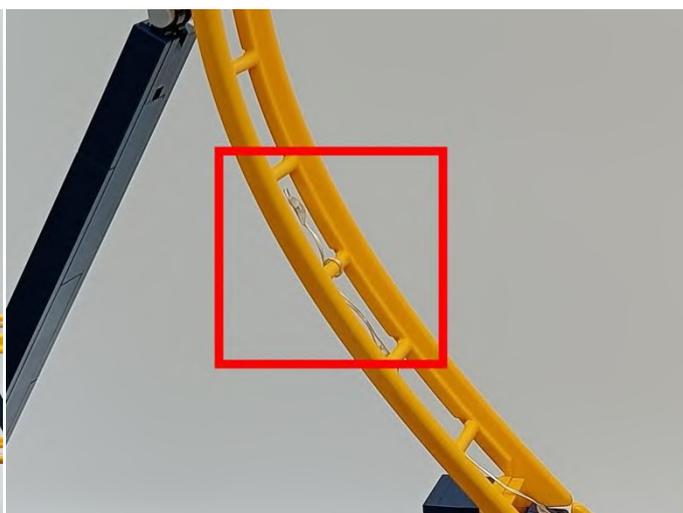
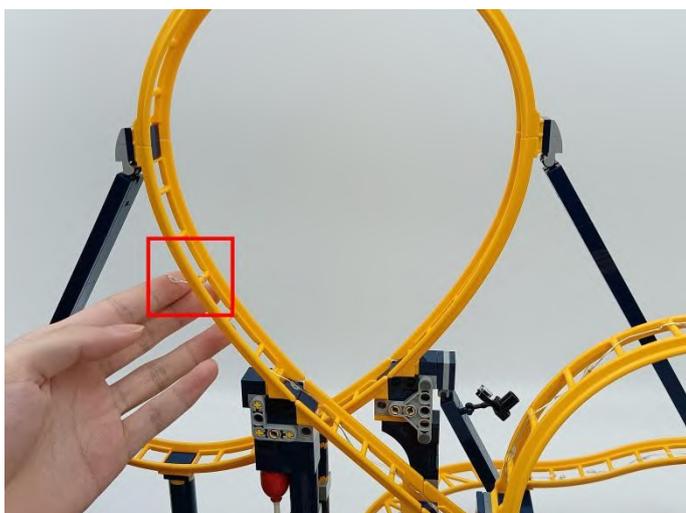
**Turn the model to the front.**



**Wind the lighting wire just now around the track.**

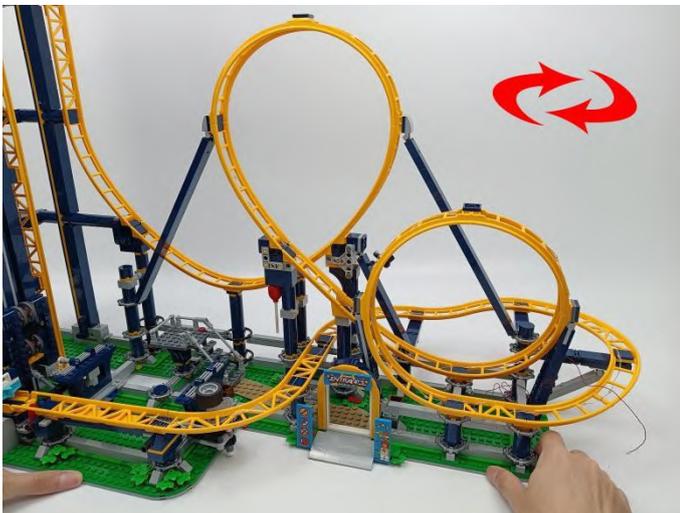


**Secure the end of the lighting wire to the track.**

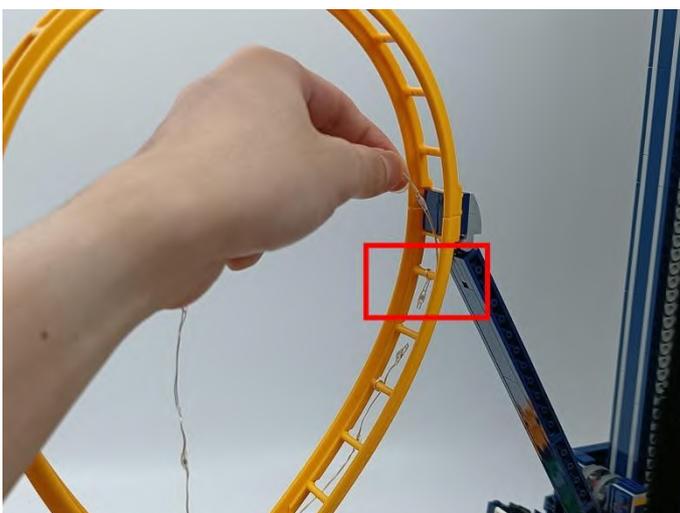




**Rotate to the other side.**



**Fasten the tail of the lighting wire to the track in the picture.**



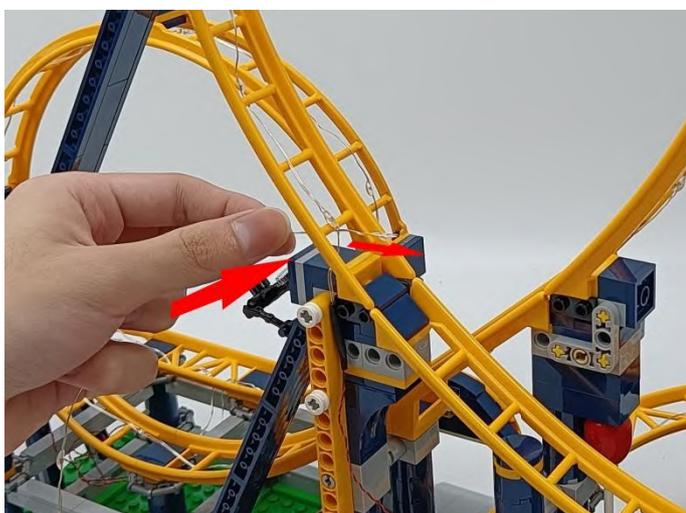
**Wrap the remaining lighting wire around the track. The black part of the lighting line is placed in the red box in the picture.**



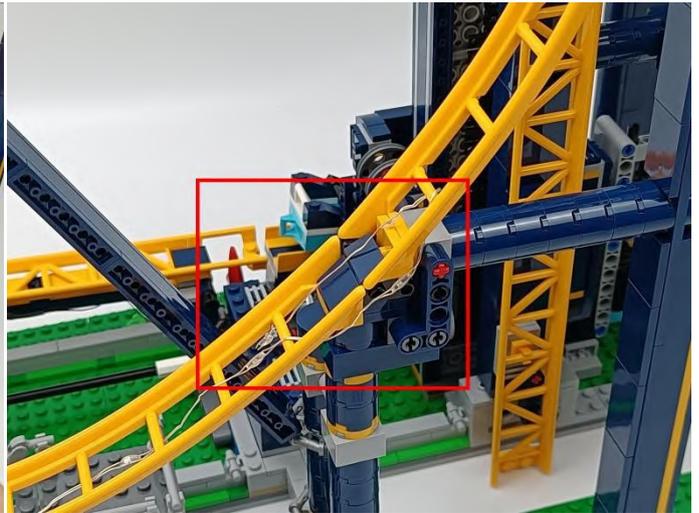
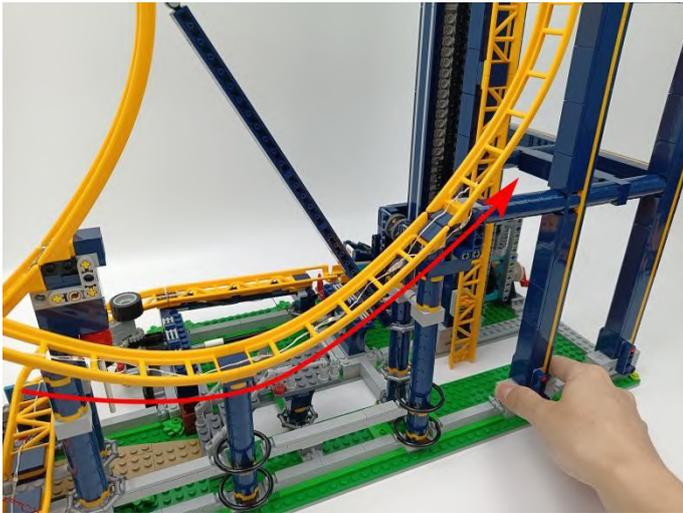
**70**



**Thread the tail of the lighting wire through the track. The black part of the lighting line is placed in the position on the picture.**



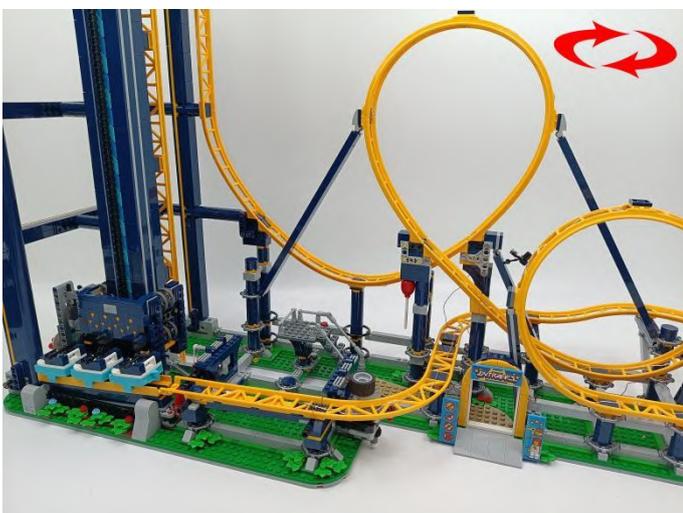
**Wrap the remaining lighting wire around the track. The lighting wire at the end is fastened to the track.**



**71**



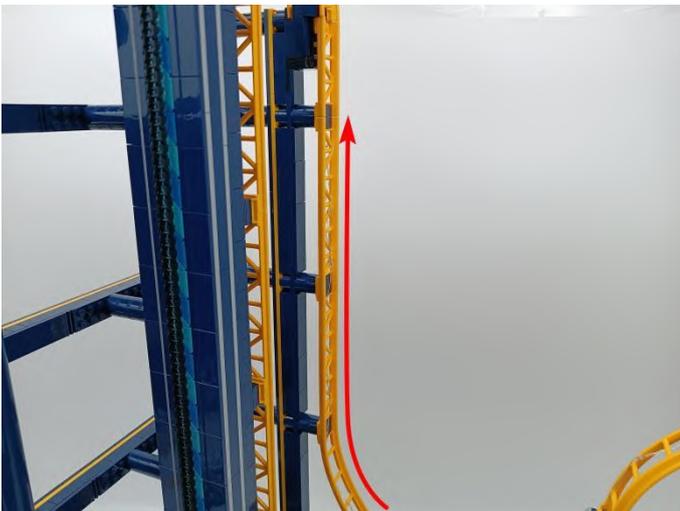
**Rotate to the front.**



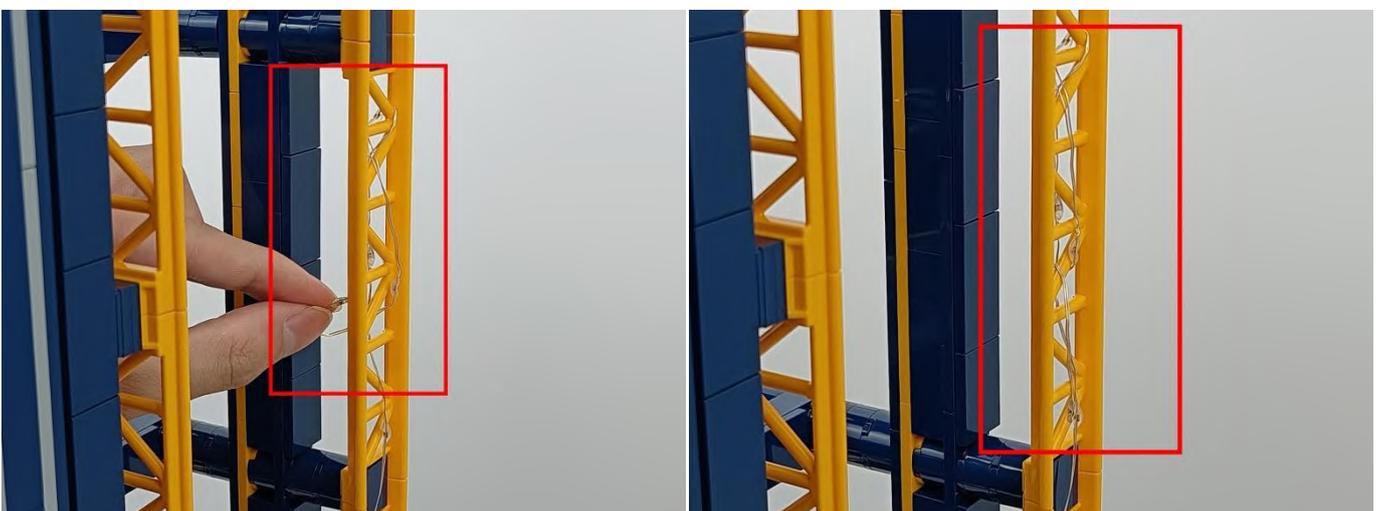
The black part of the lighting wire goes through the track. Put it in the position in the picture.



The lighting cord is wound on the track.



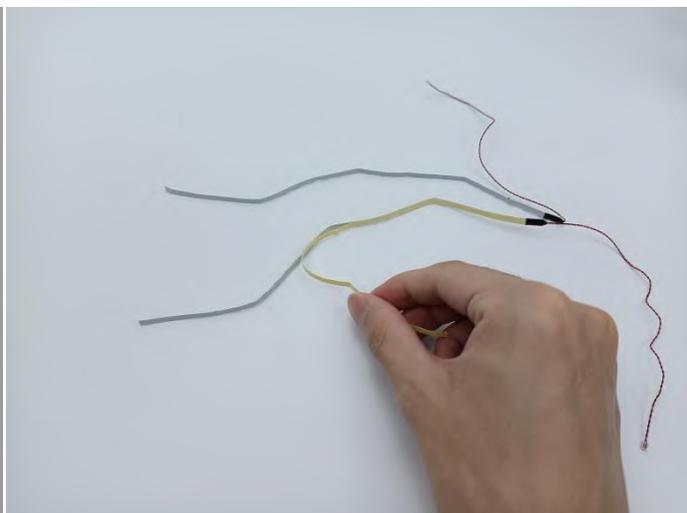
The remaining lighting wire is wound in the position shown in the picture.



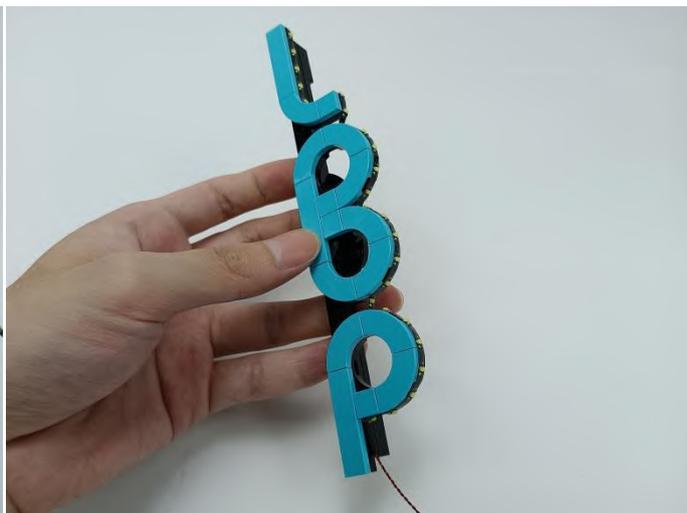
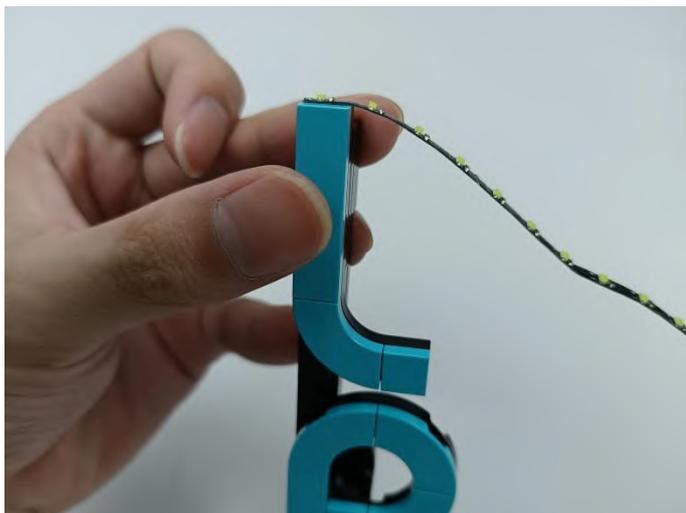
72



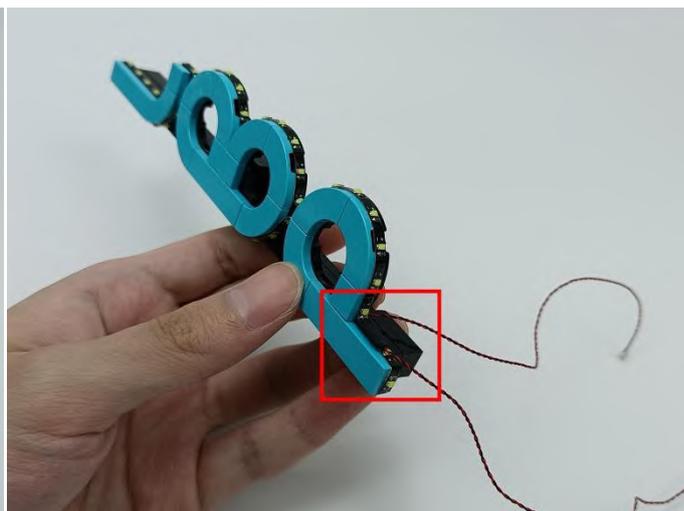
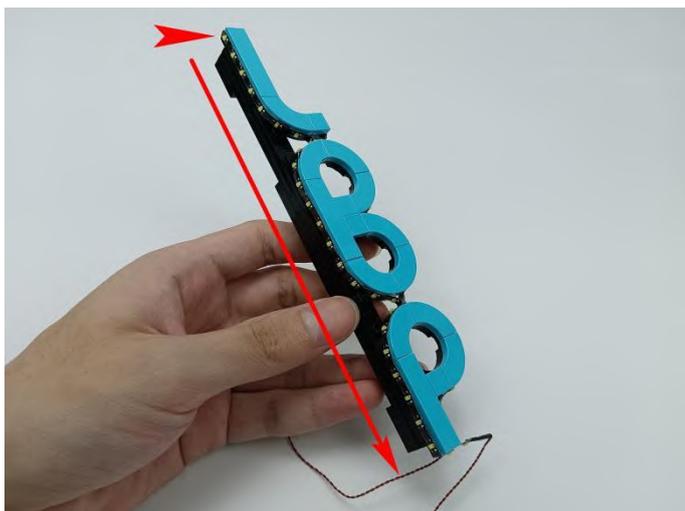
73



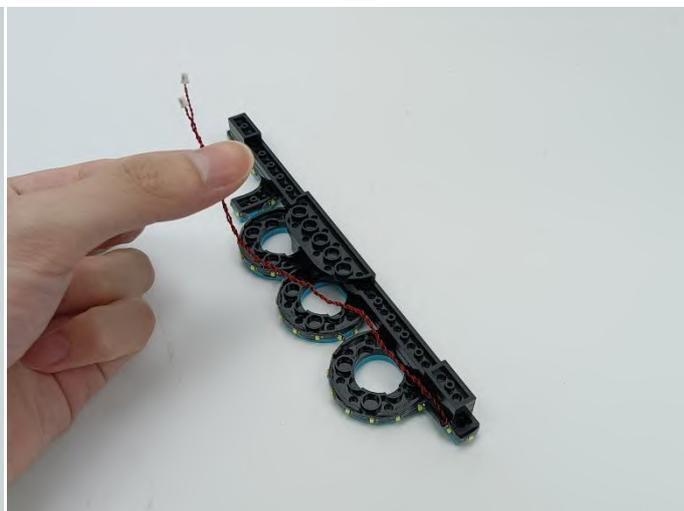
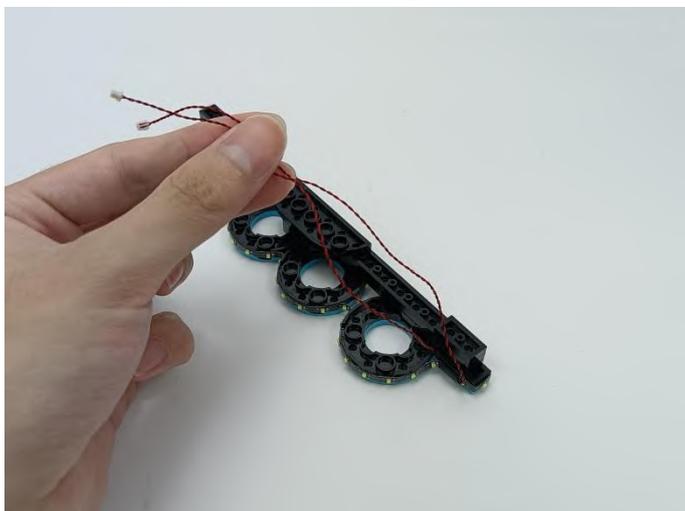
74



75



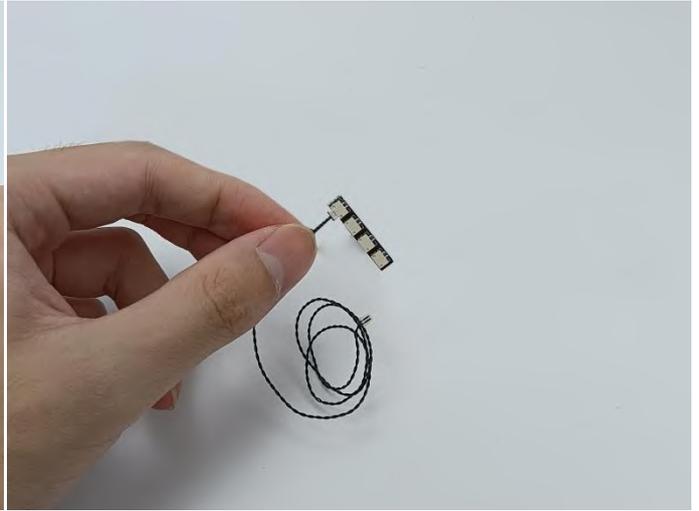
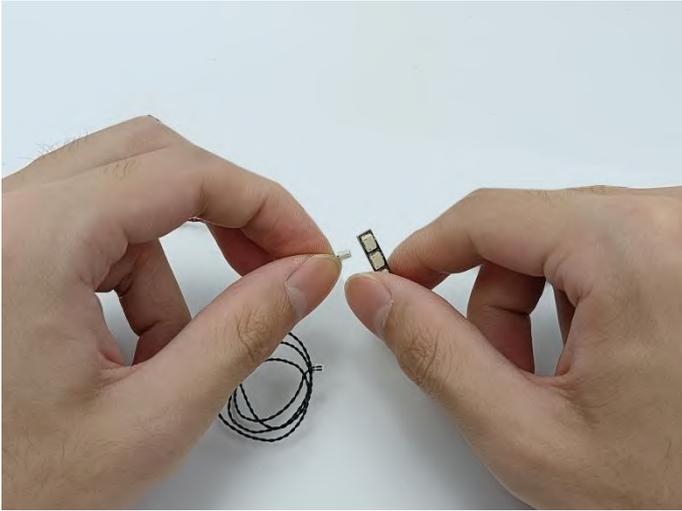
76



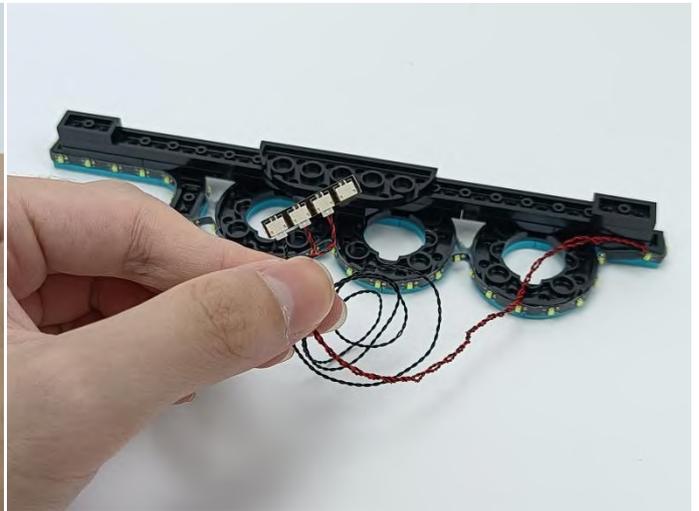
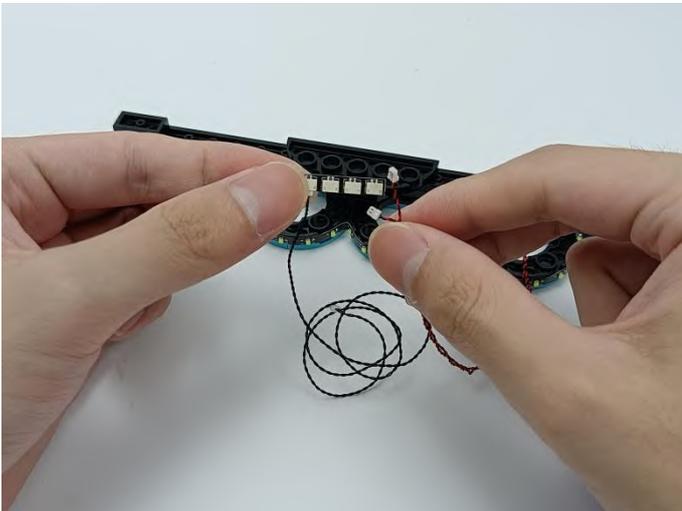
77



78



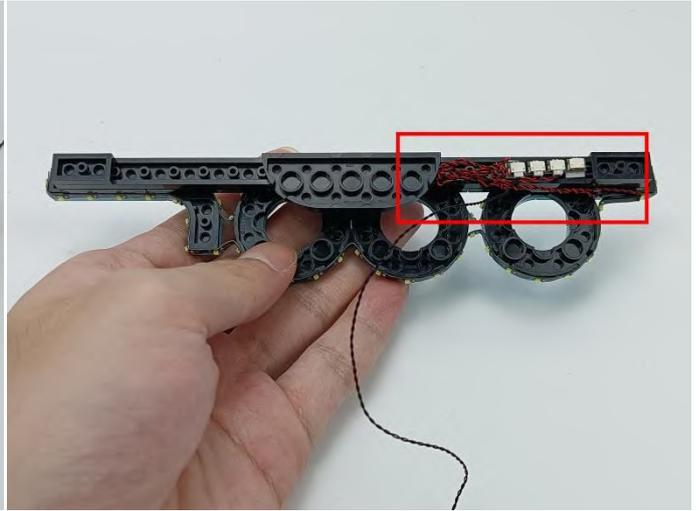
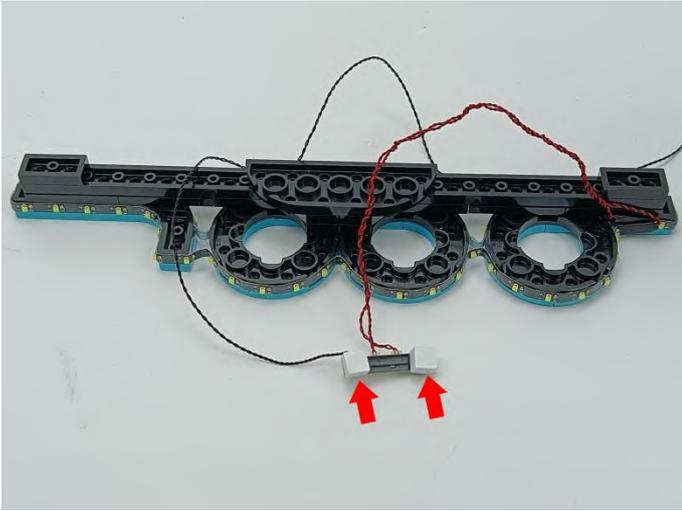
79



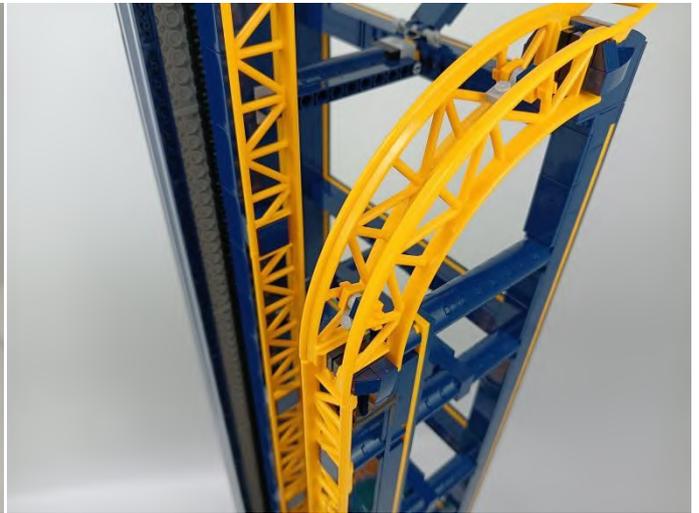
80



81



82



83



## Tips

The plate without slit:

### The plate without slit:

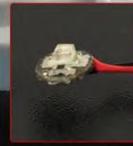
The squeeze causes the protective layer of the wire to be torn apart, the positive and negative wires touch together, and the set is short-circuited and the hot or wire is crushed, the wire to be disconnected and don't work.



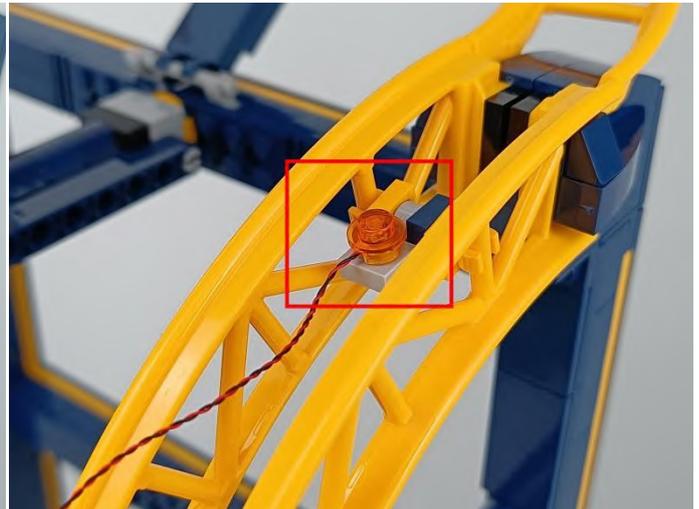
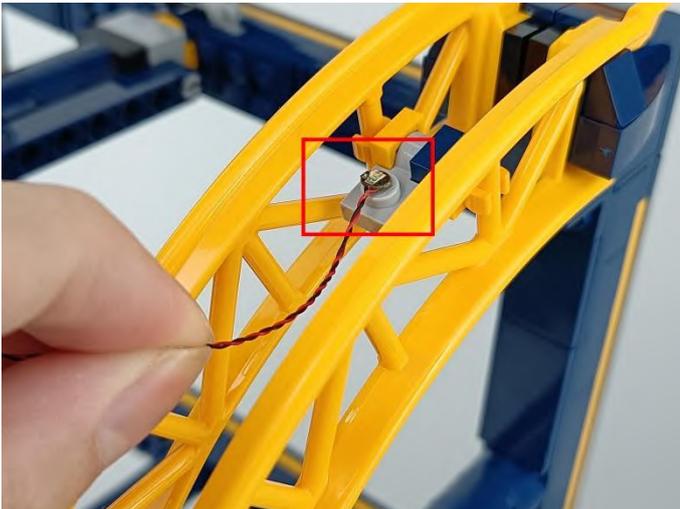
The plate with slit:

### The plate with slit:

The wire has enough space to avoid being squeezed 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.



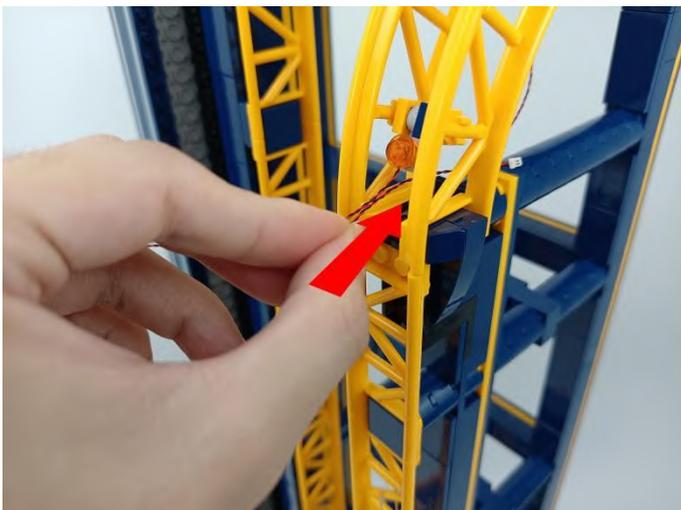
86



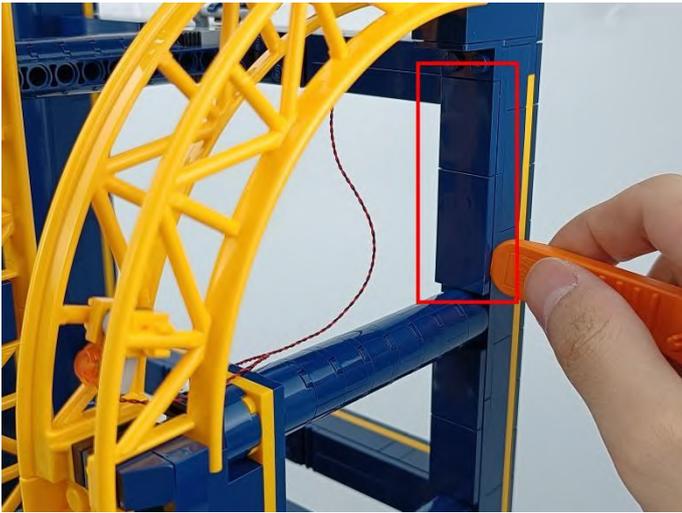
87



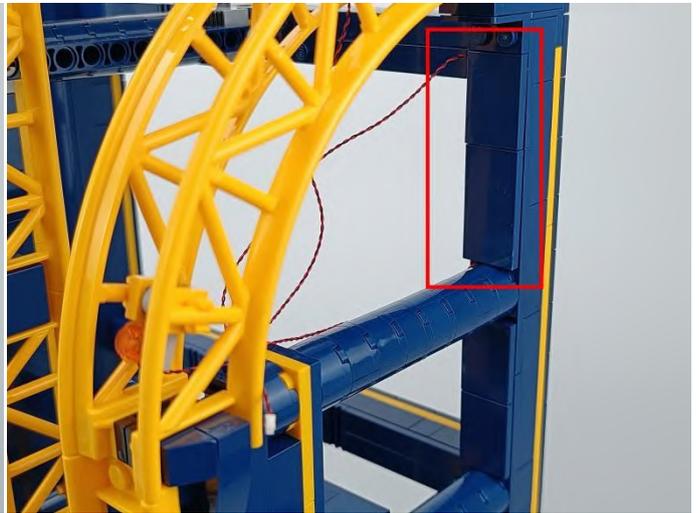
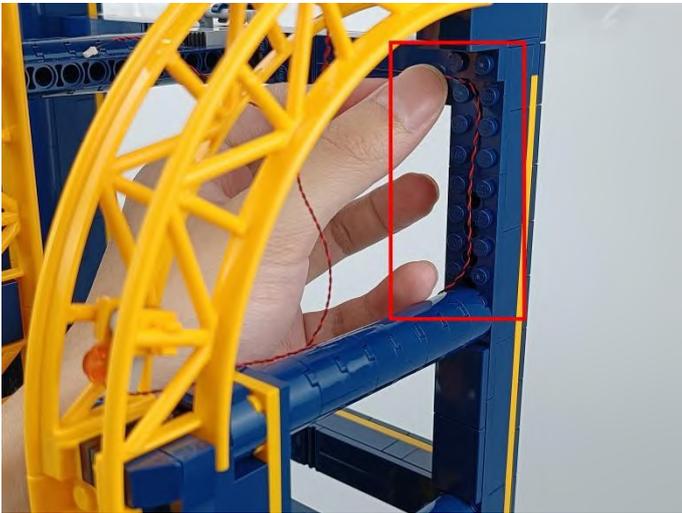
88



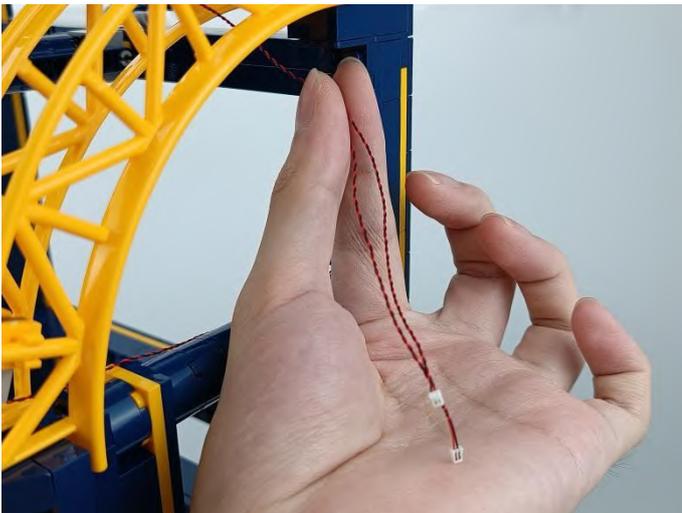
89



90



91



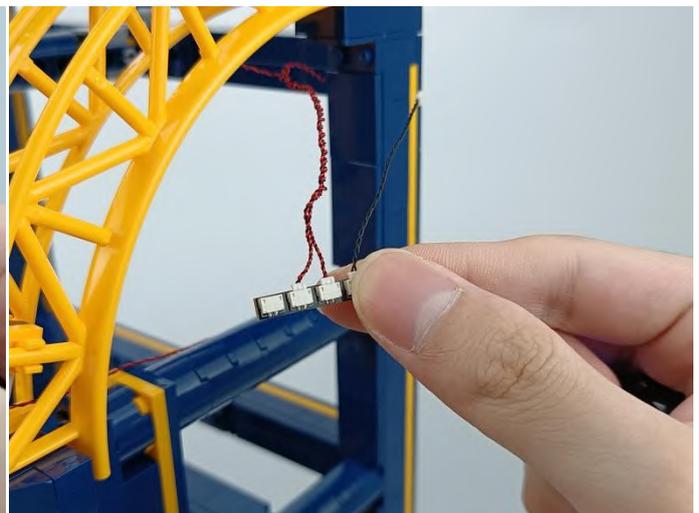
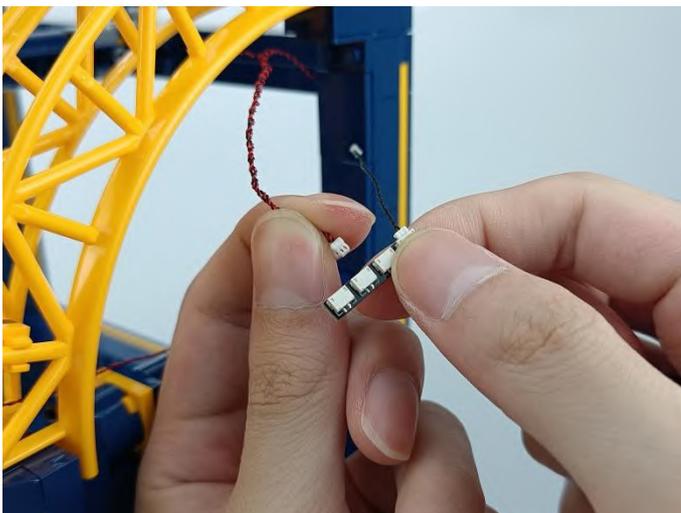
92



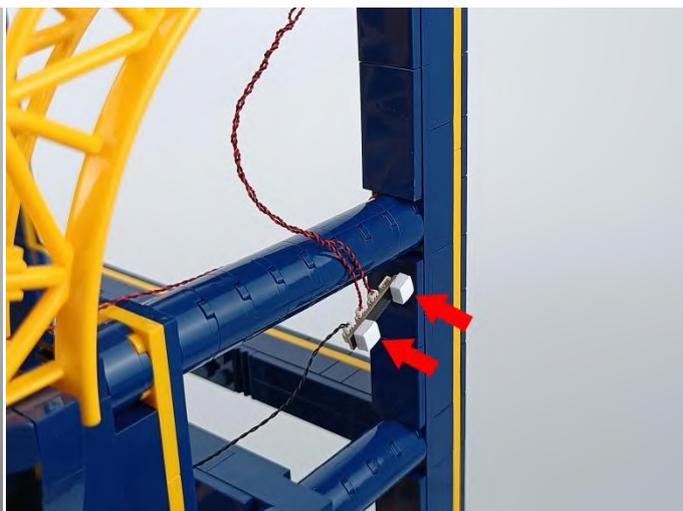
93



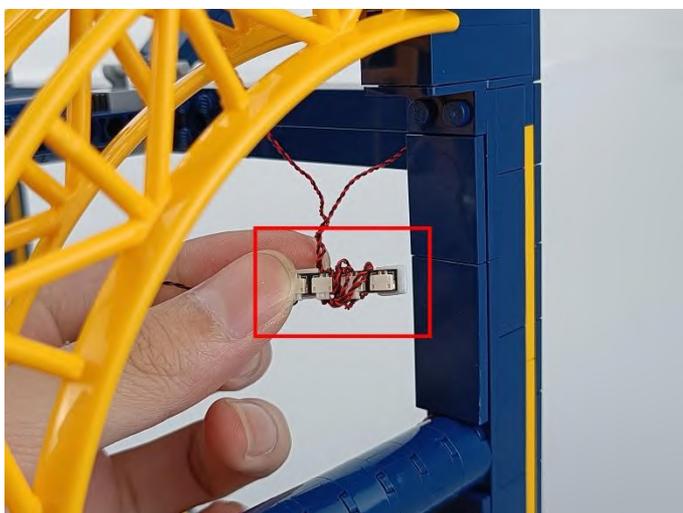
94



95



96



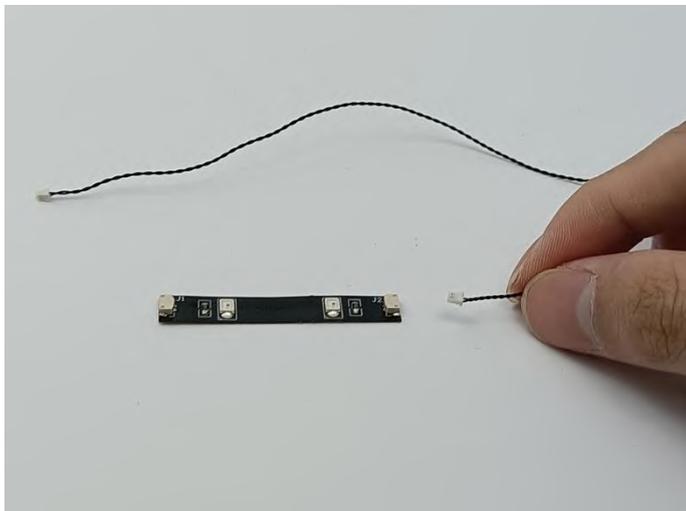
97



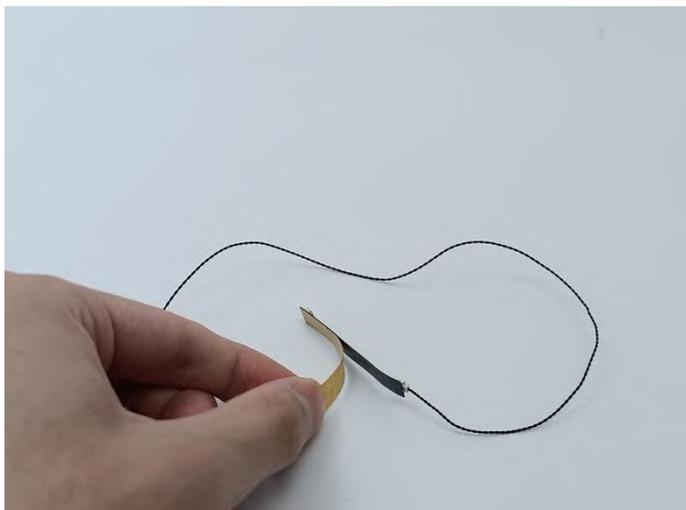
98



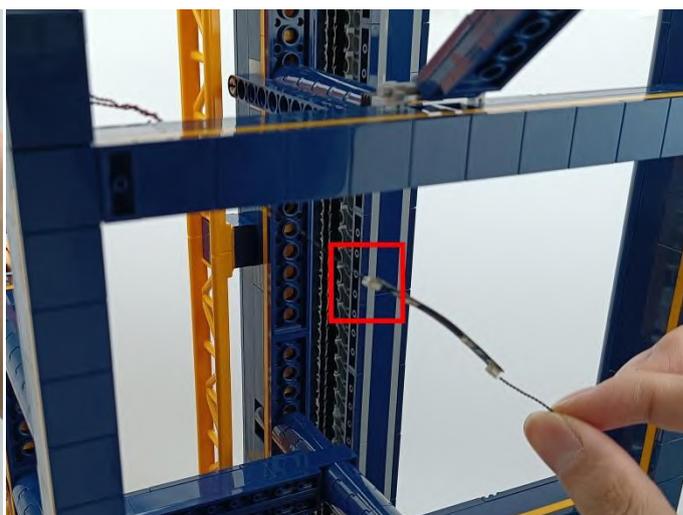
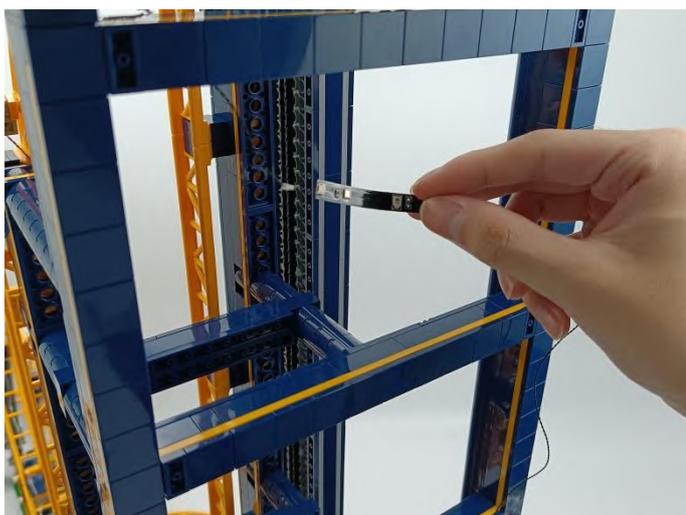
99



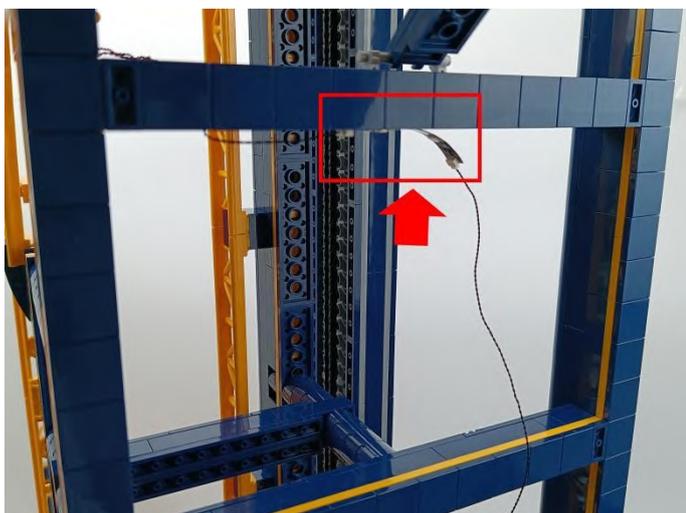
100



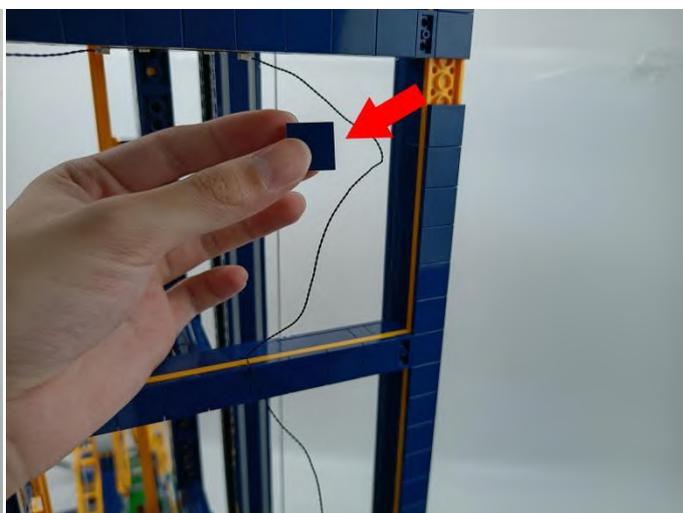
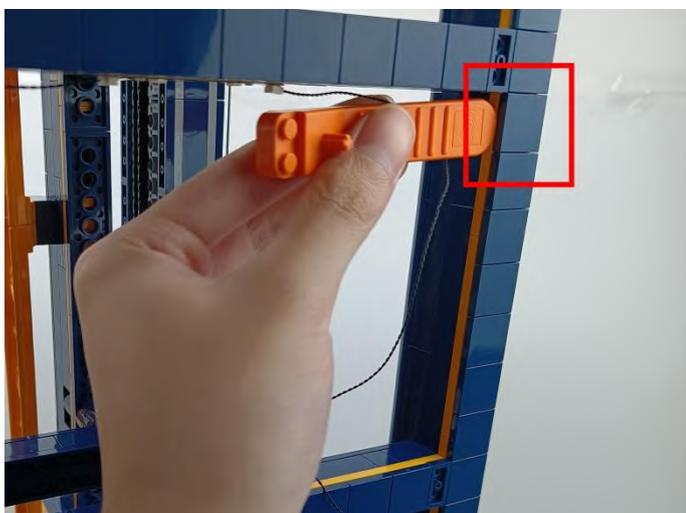
**Connect the light bar to the black cable on the expansion board just now.**



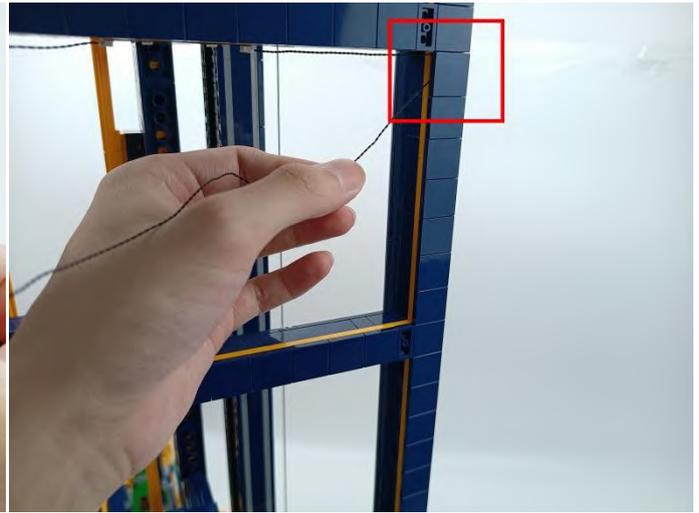
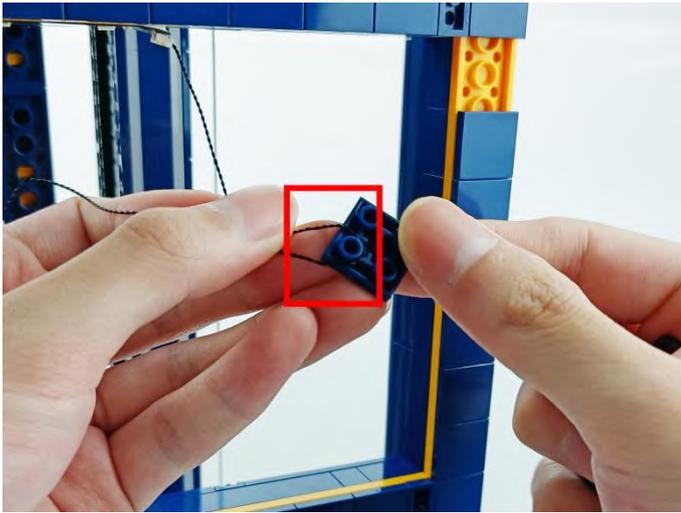
**101**



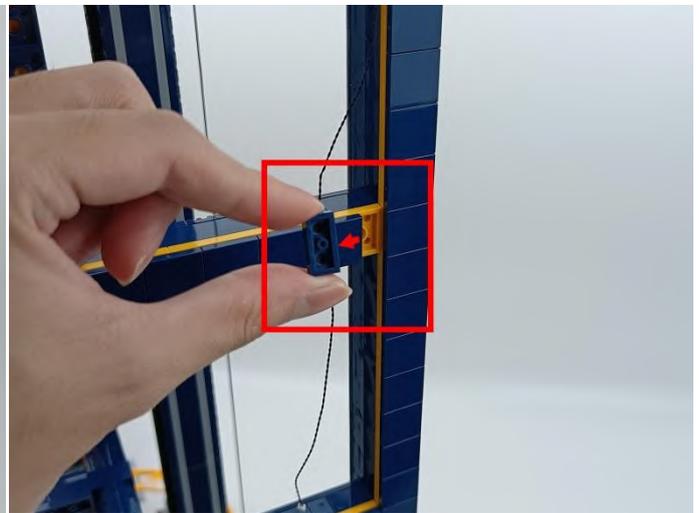
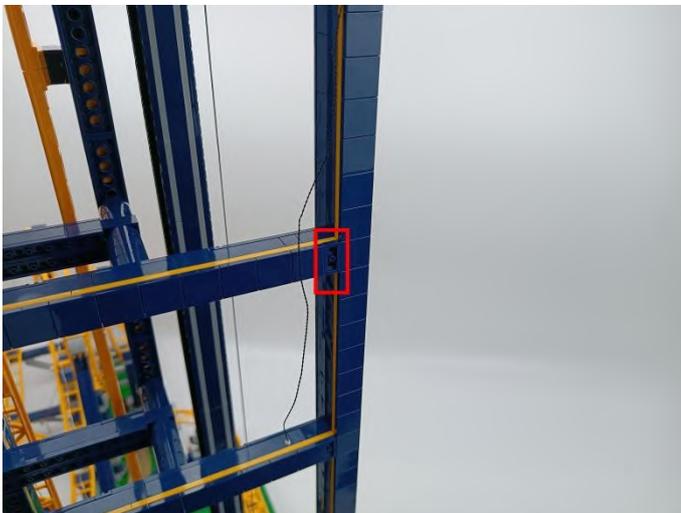
**102**



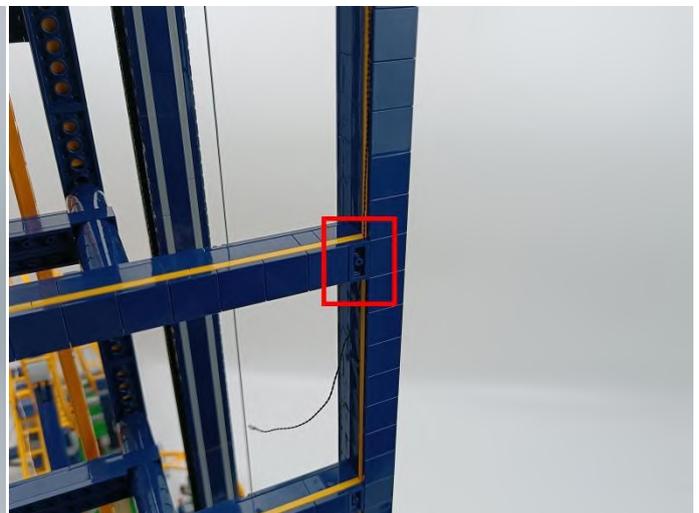
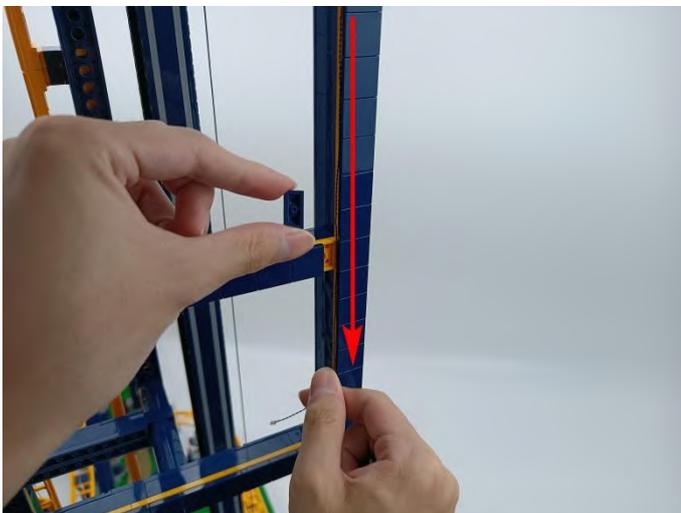
103



104



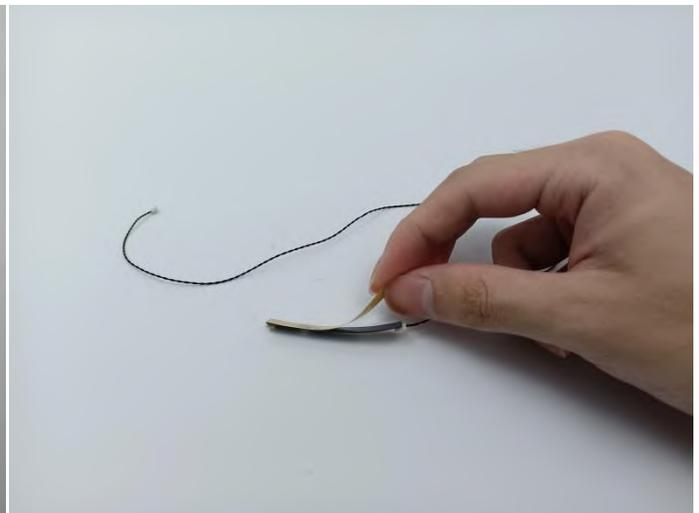
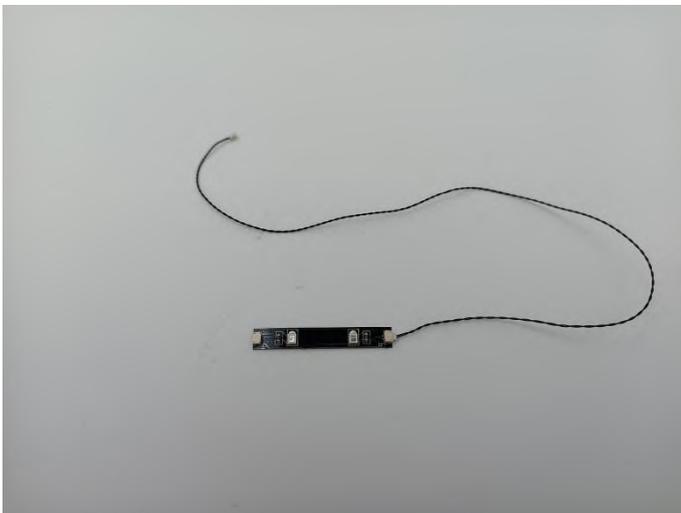
**The black connecting wire is pulled down. Secure the connecting line with building blocks.**



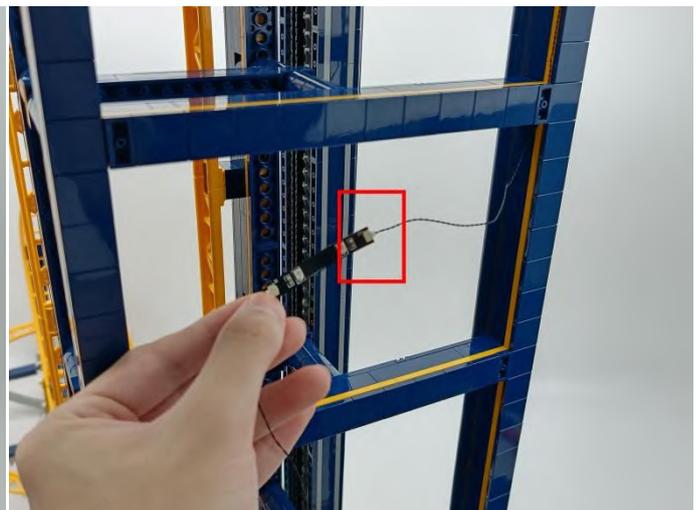
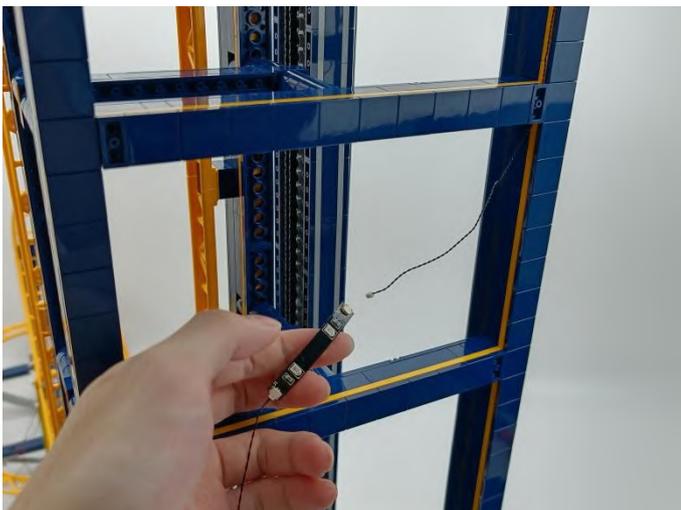
105



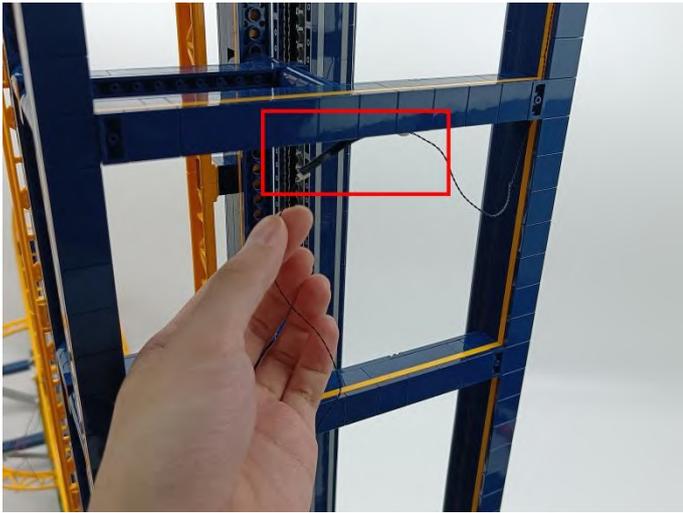
106



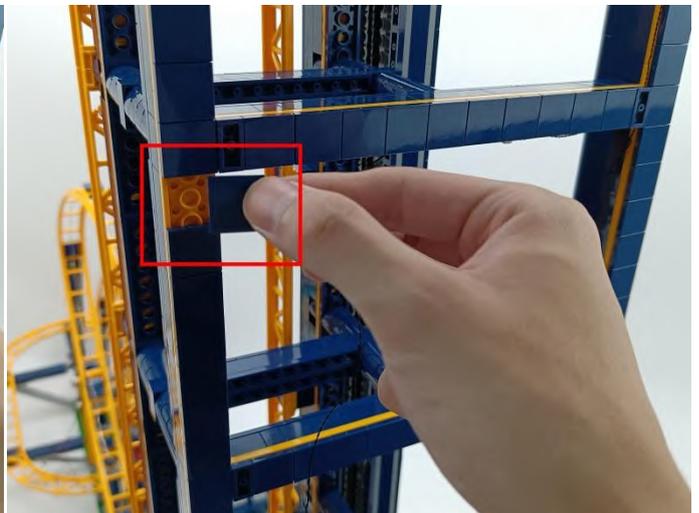
107



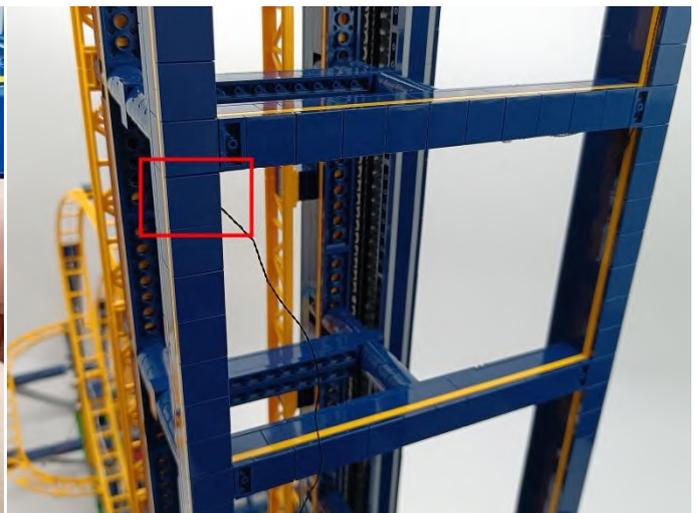
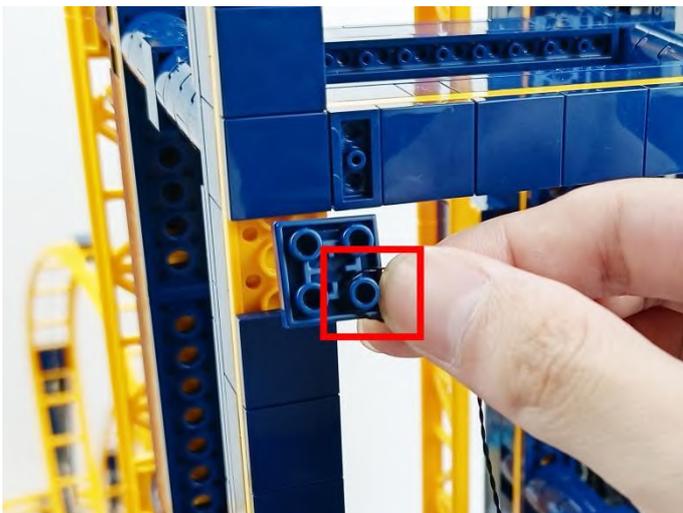
108



109



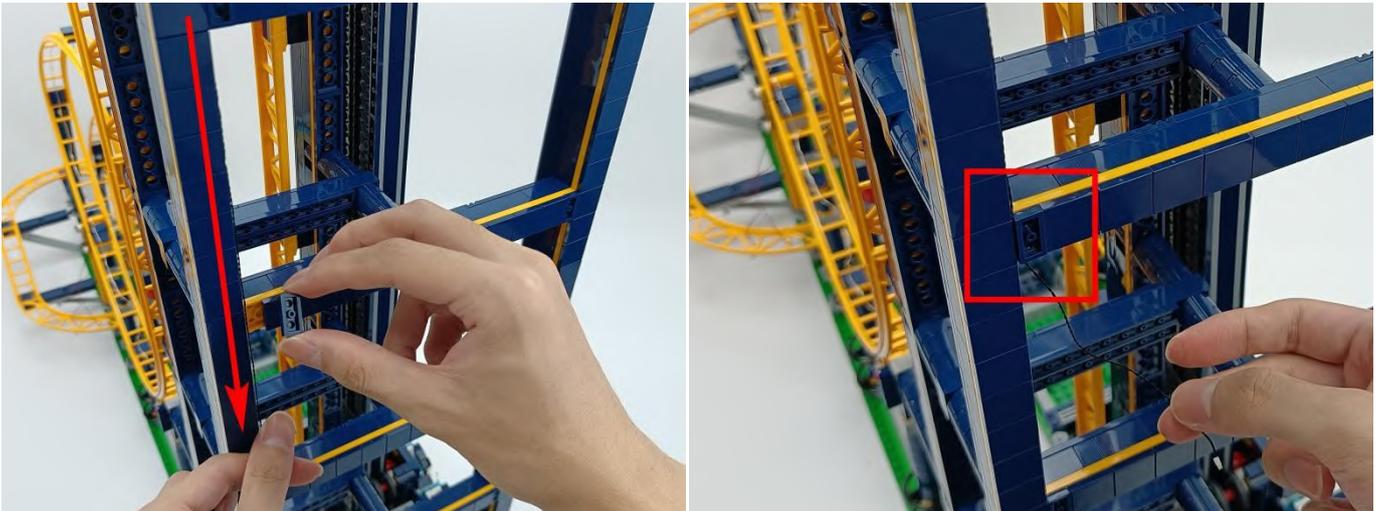
110



111



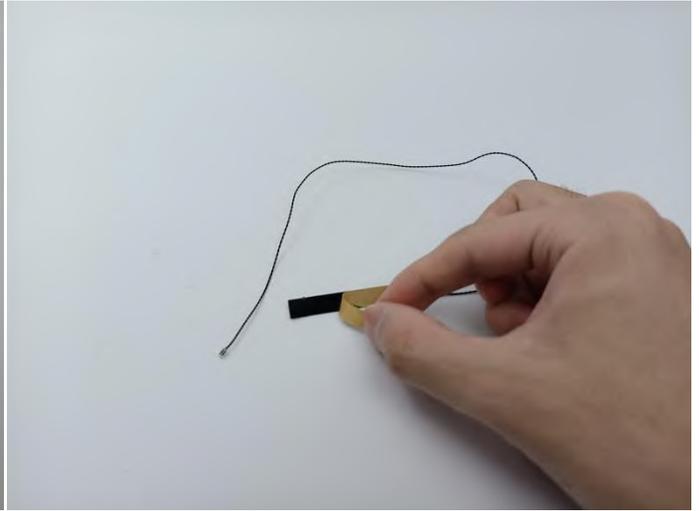
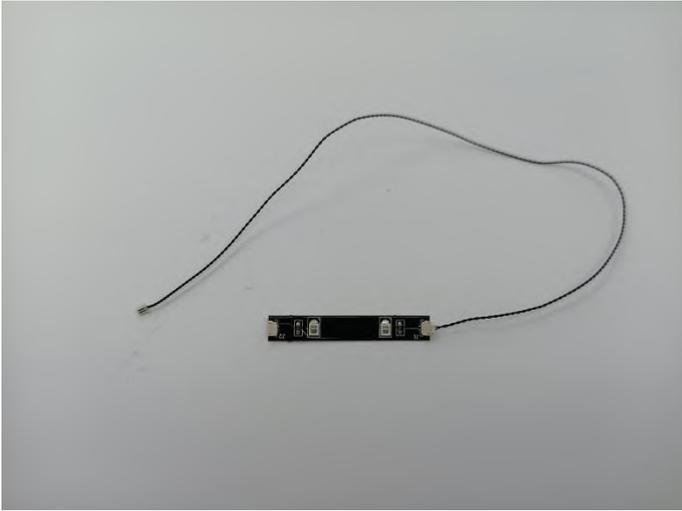
The black connecting wire is pulled down. Secure the connecting line with building blocks.



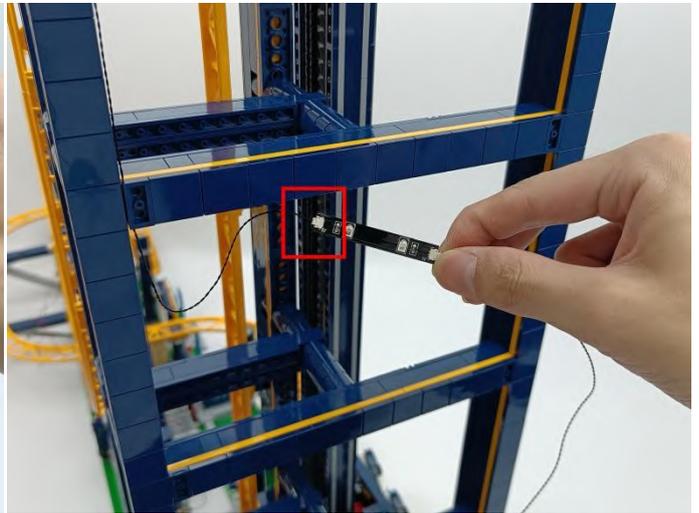
112



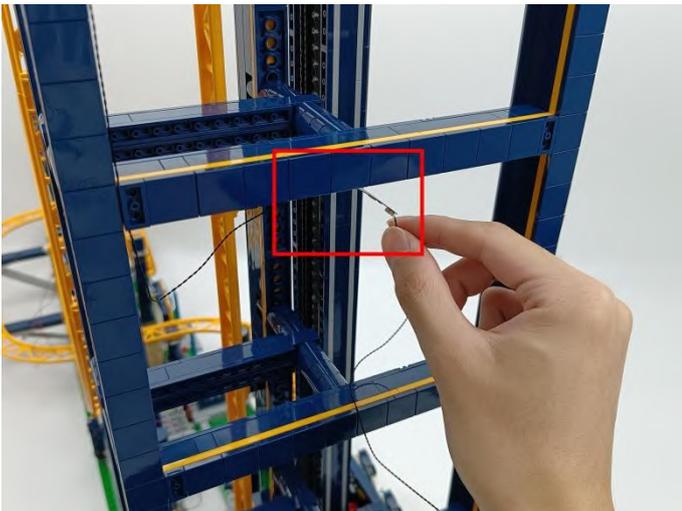
113



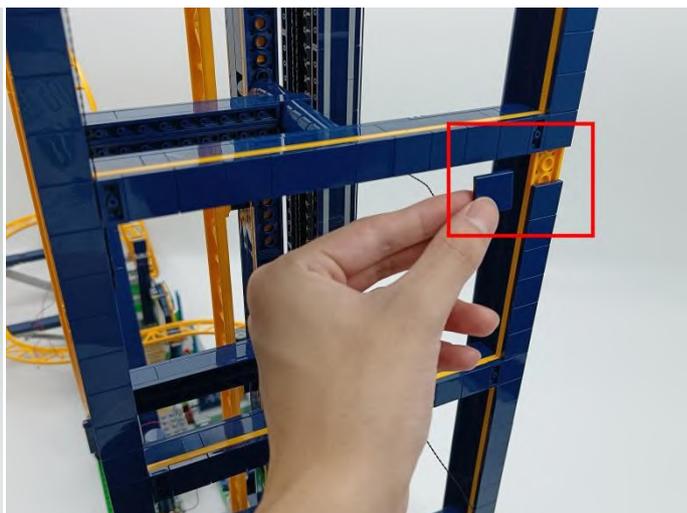
114



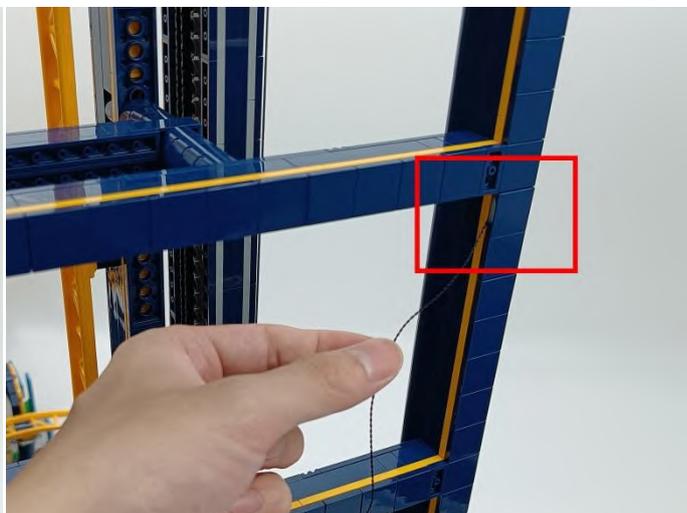
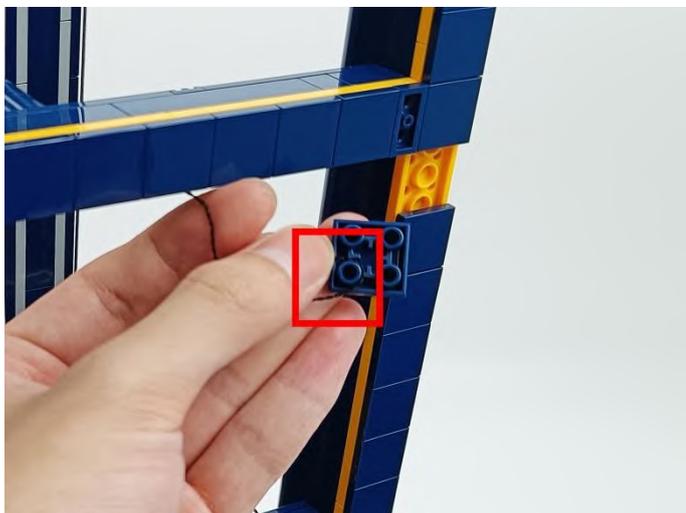
115



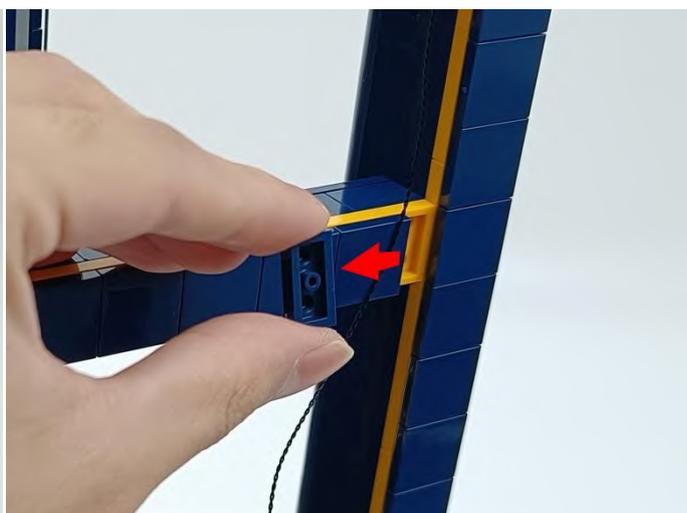
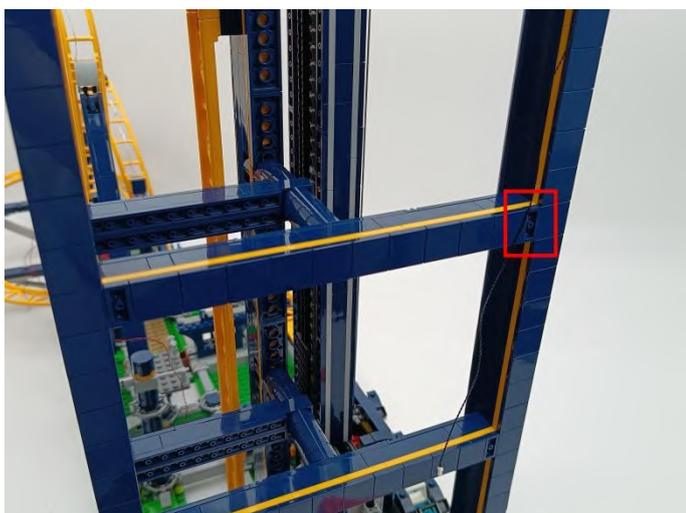
116



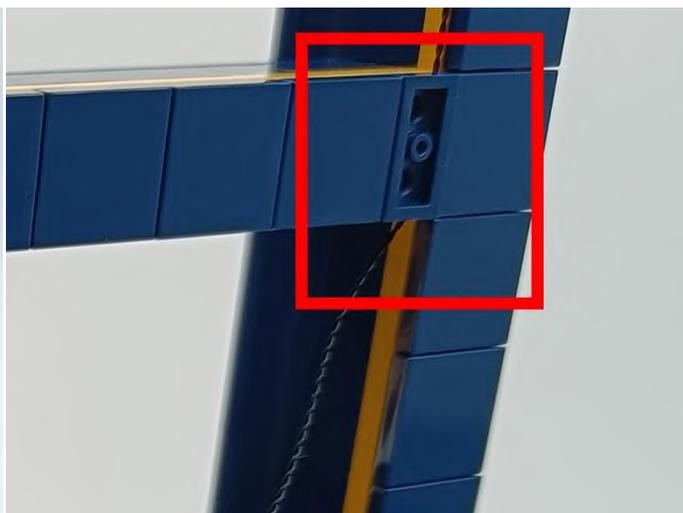
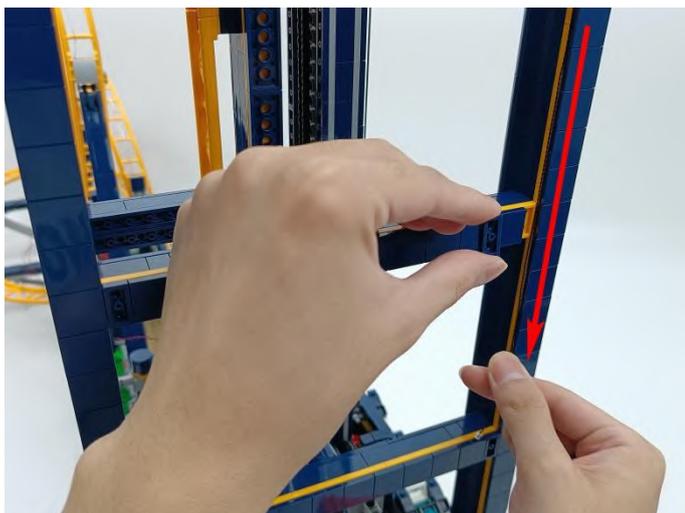
117



118



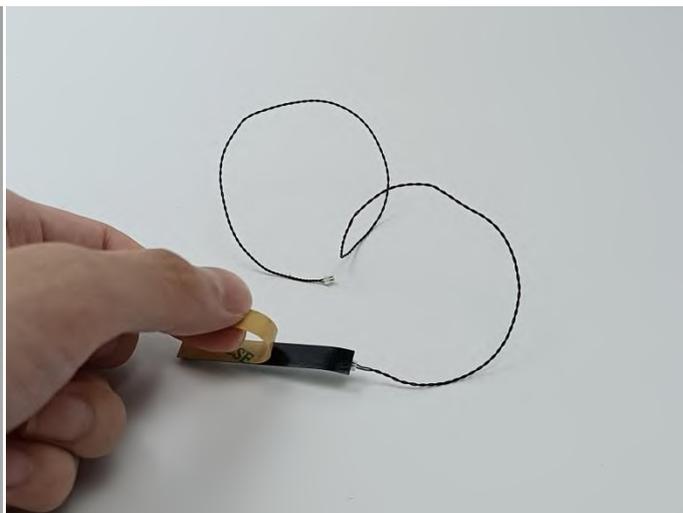
119



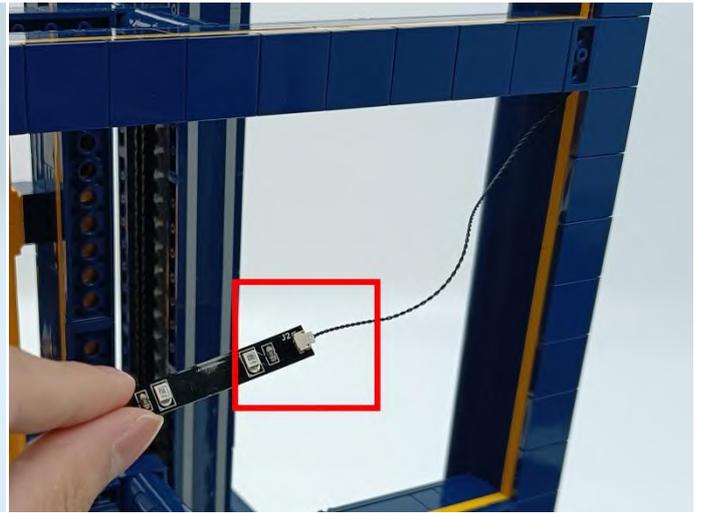
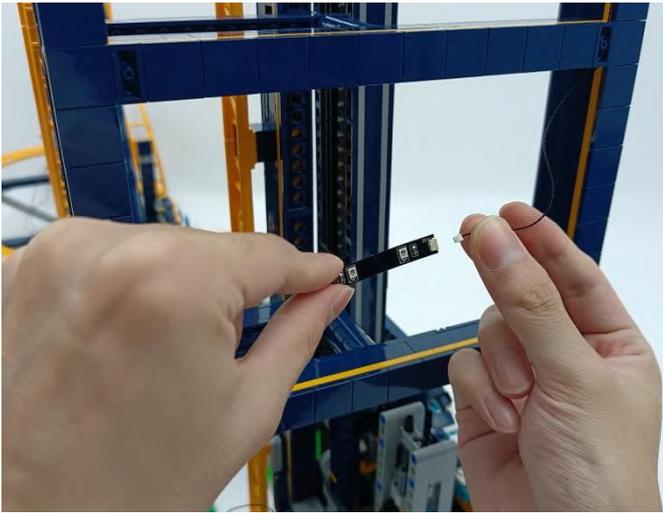
120



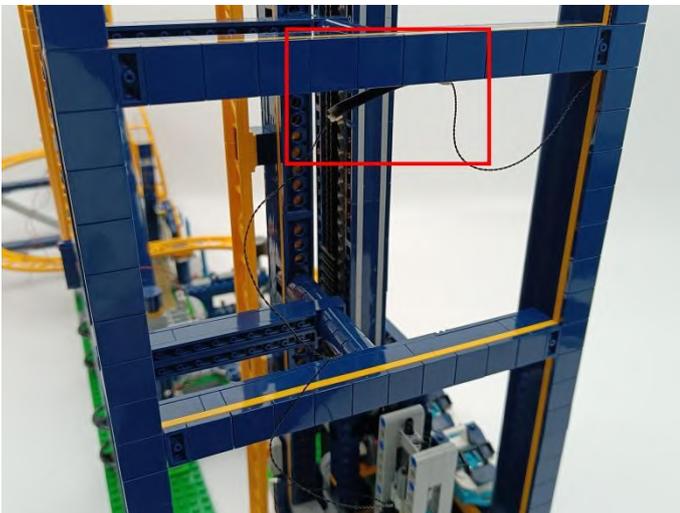
121



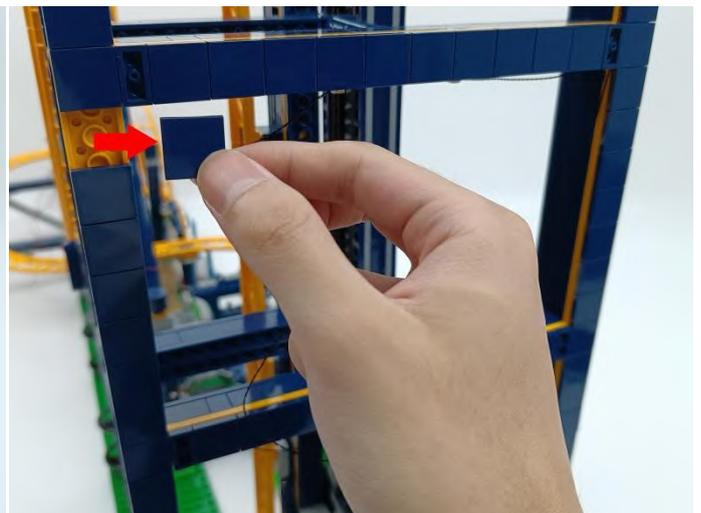
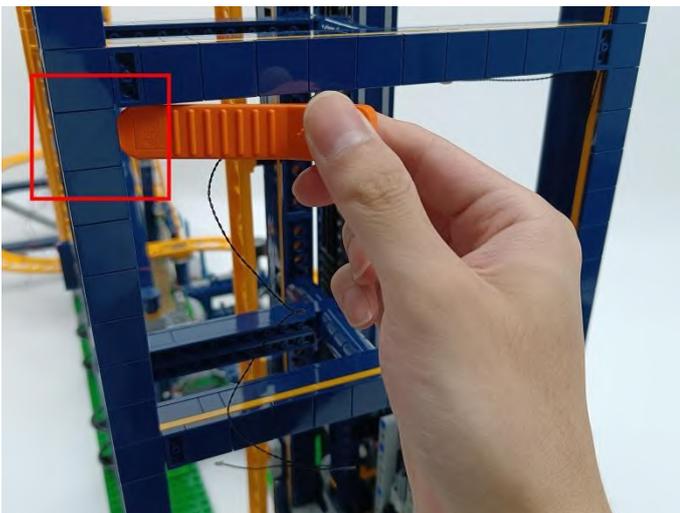
122



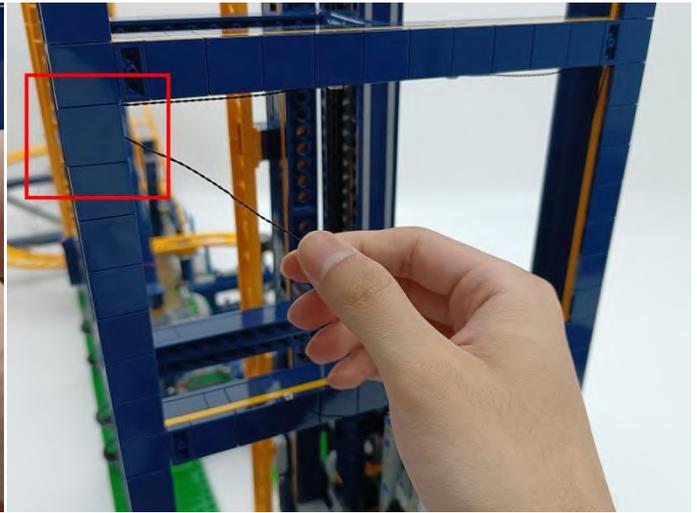
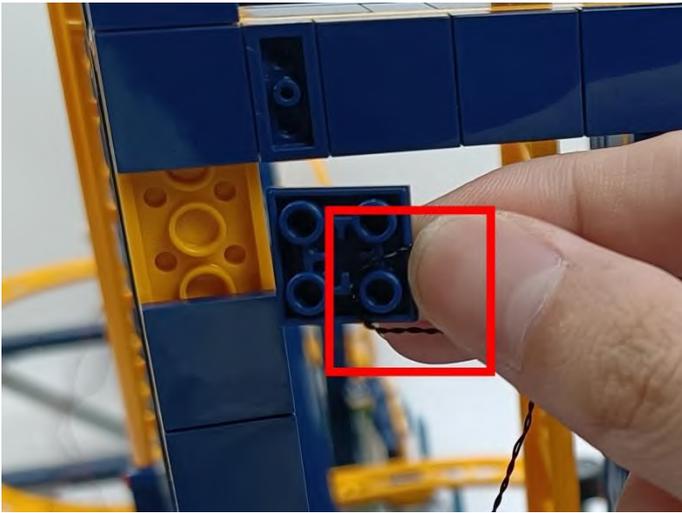
123



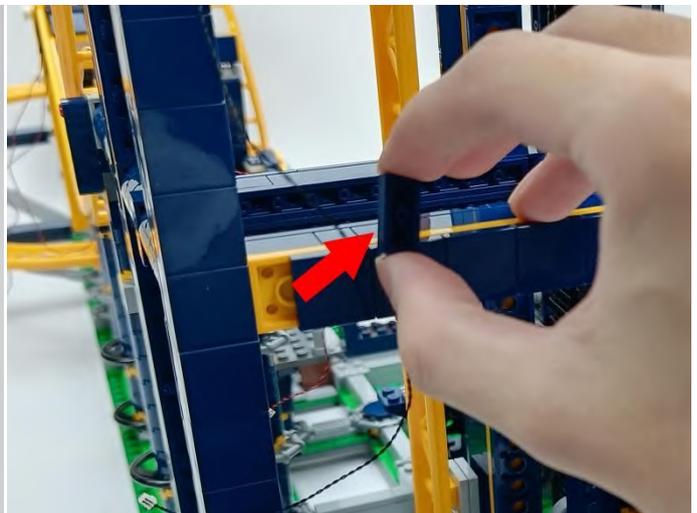
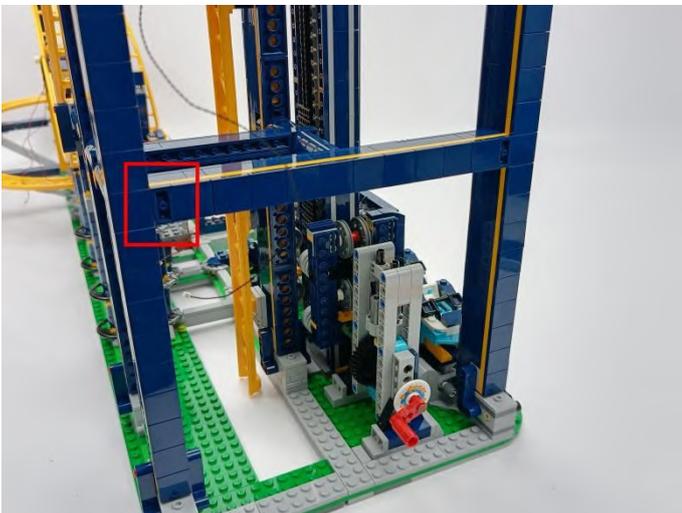
124



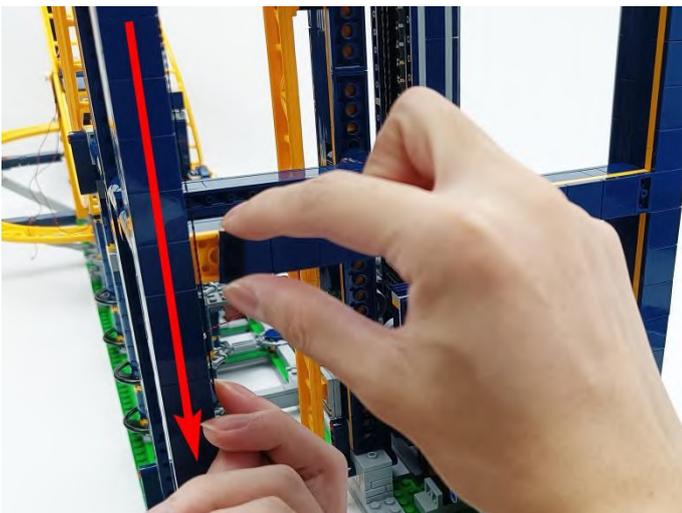
125



126



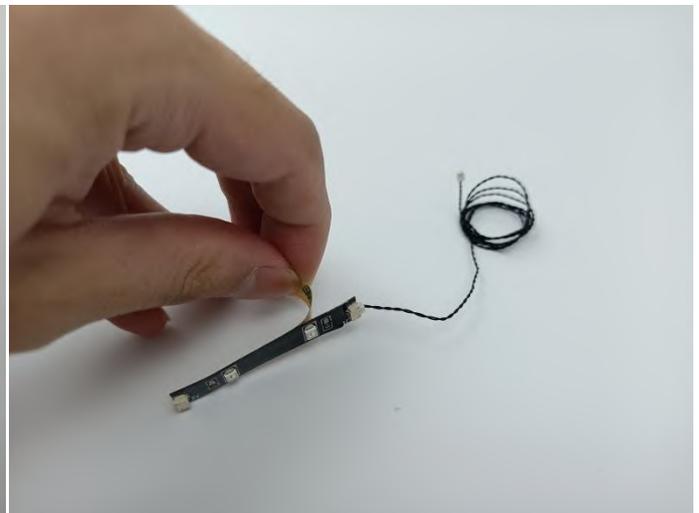
127



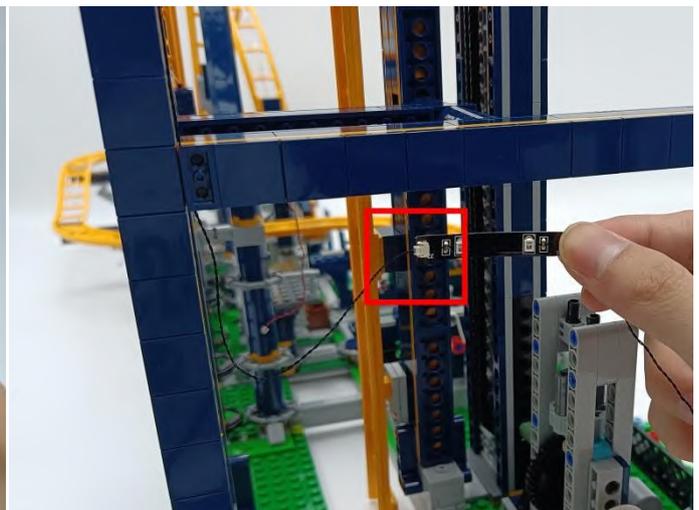
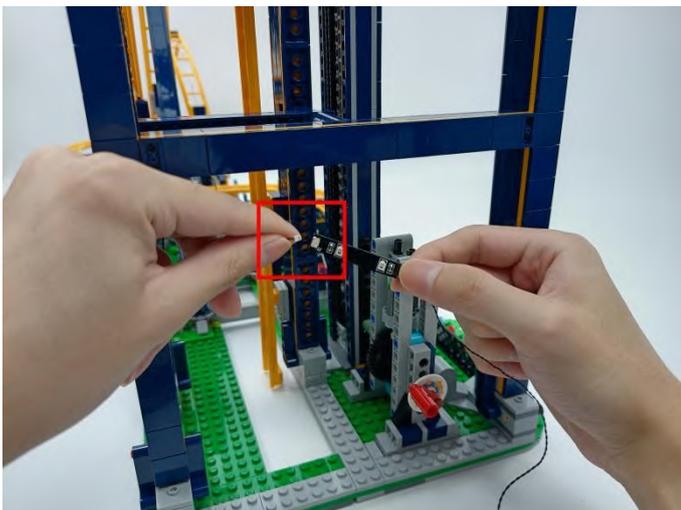
128



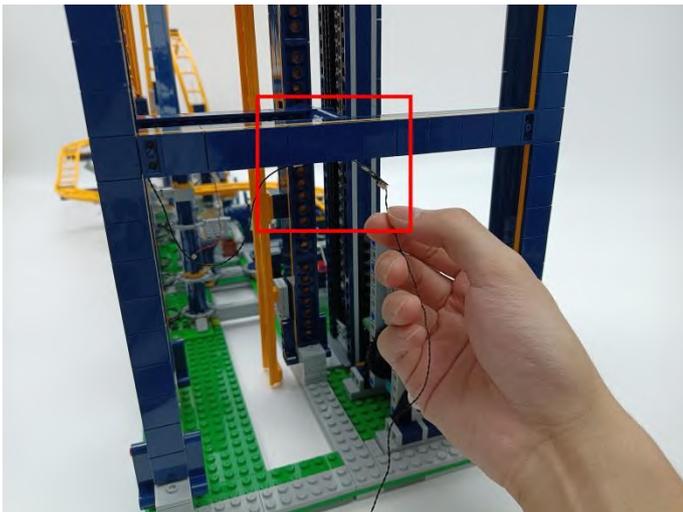
129



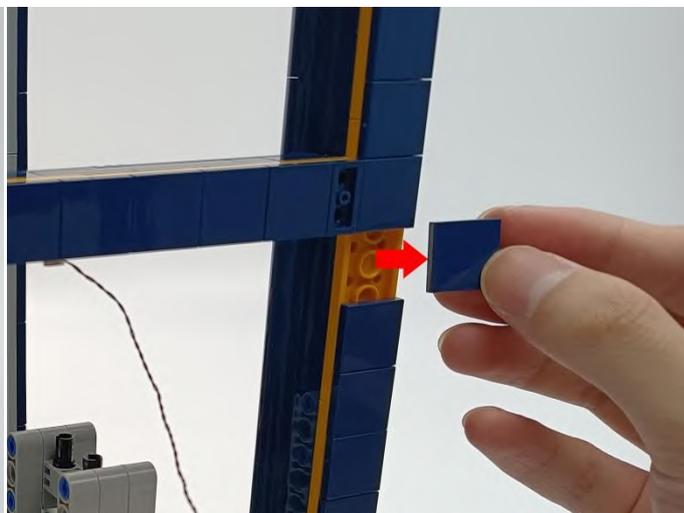
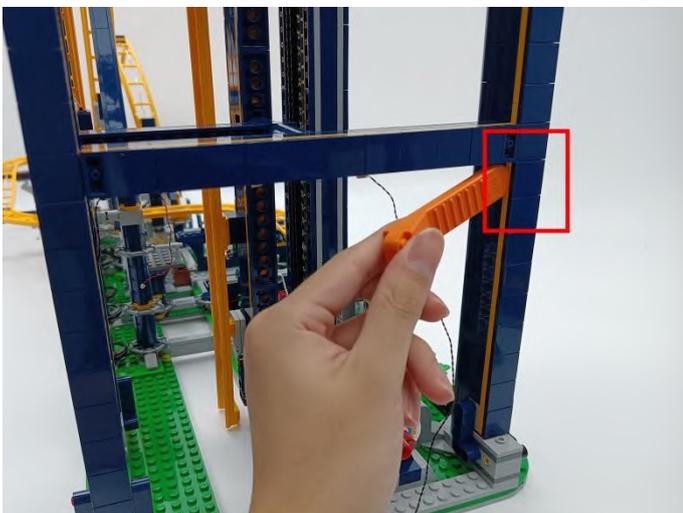
130



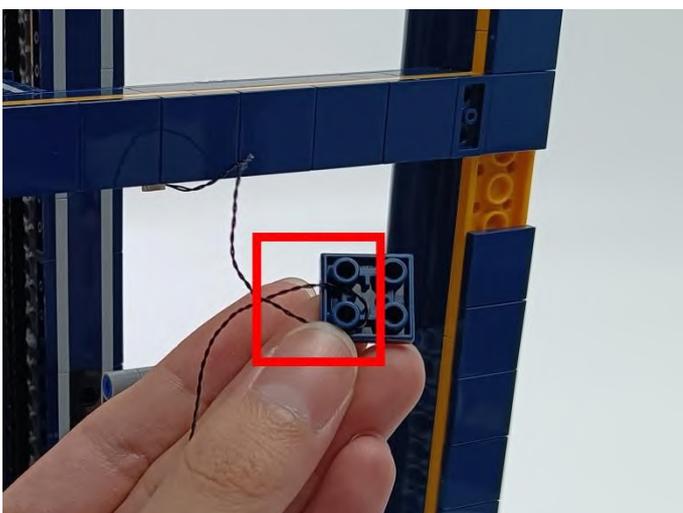
131



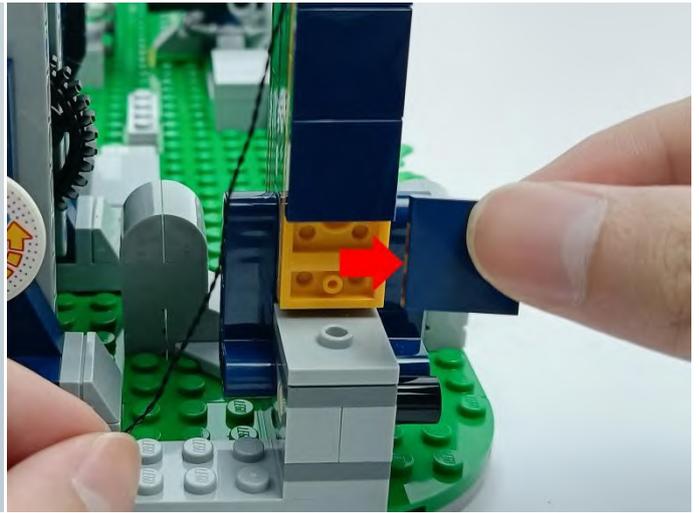
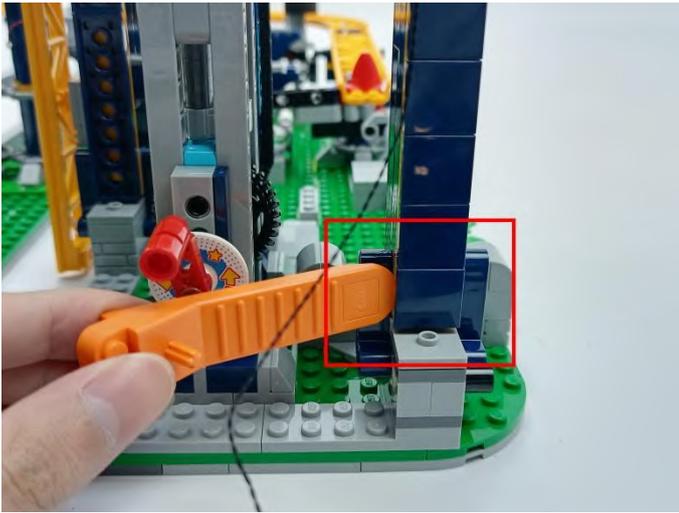
132



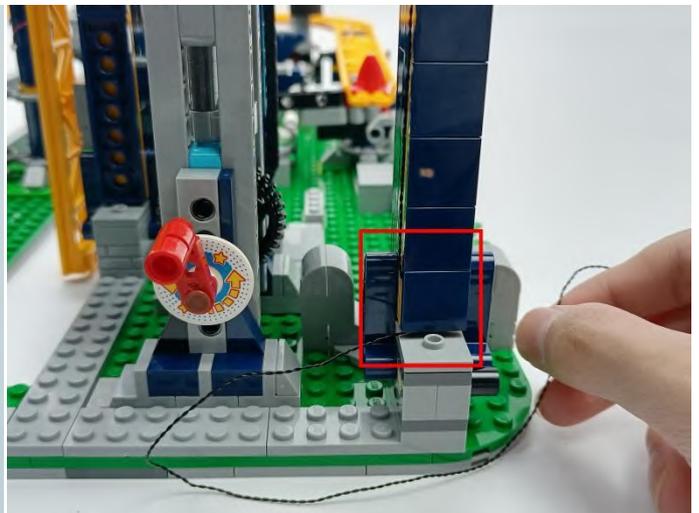
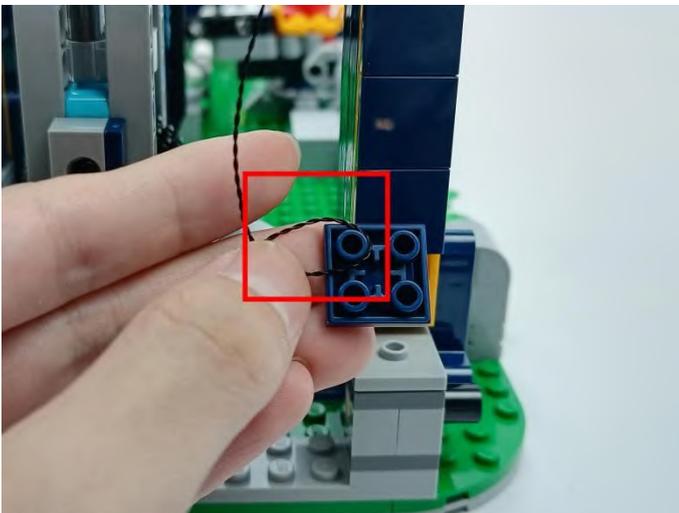
133



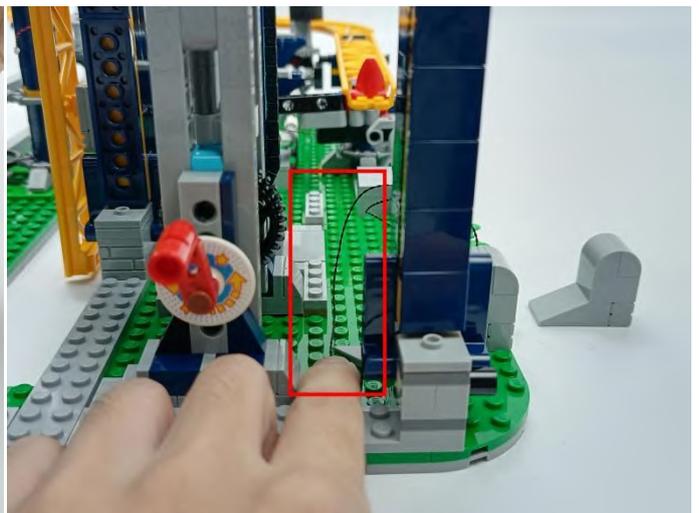
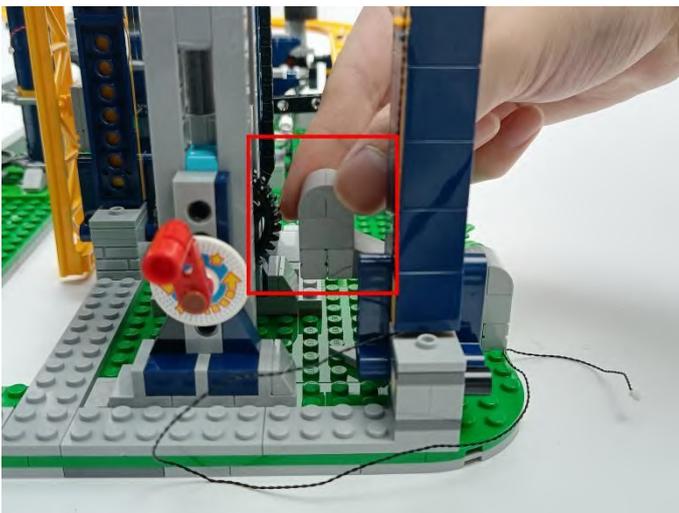
134



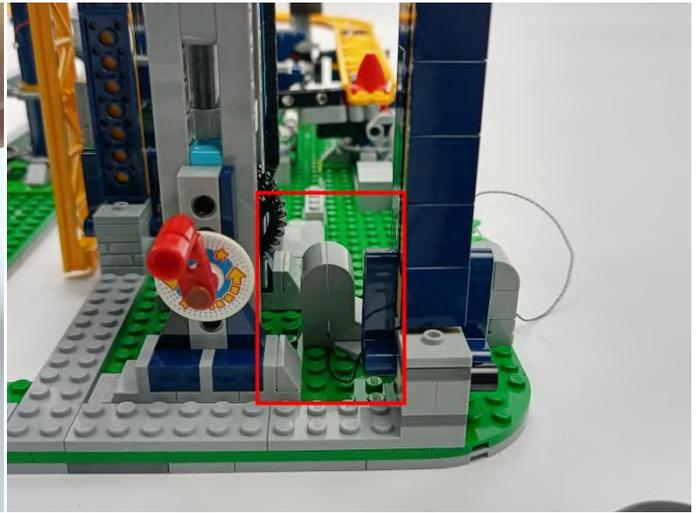
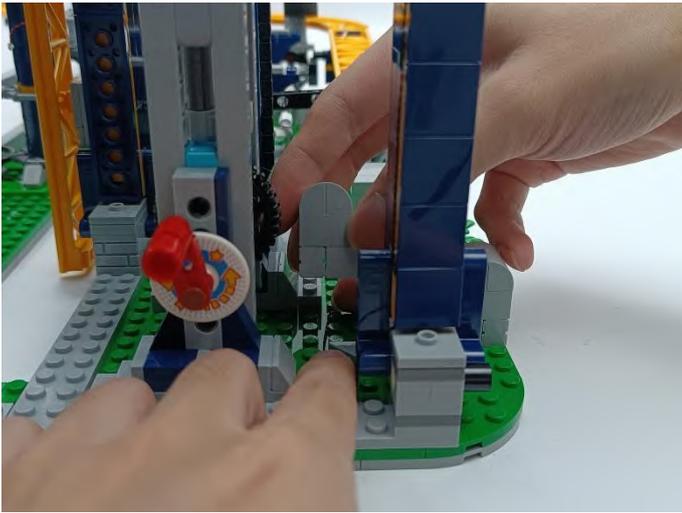
135



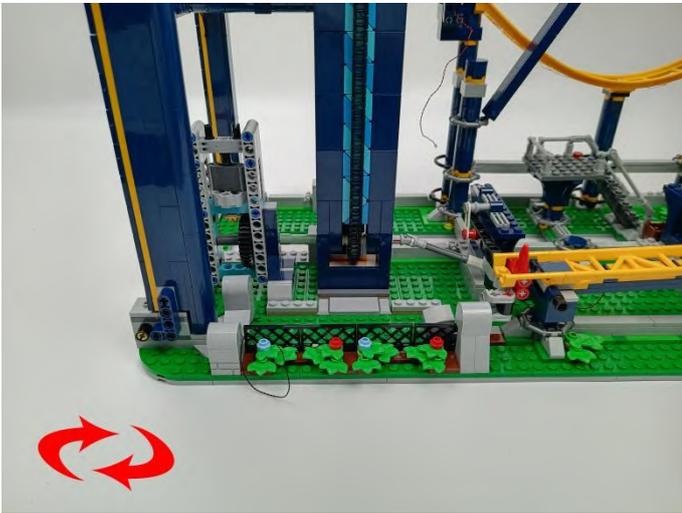
136



137



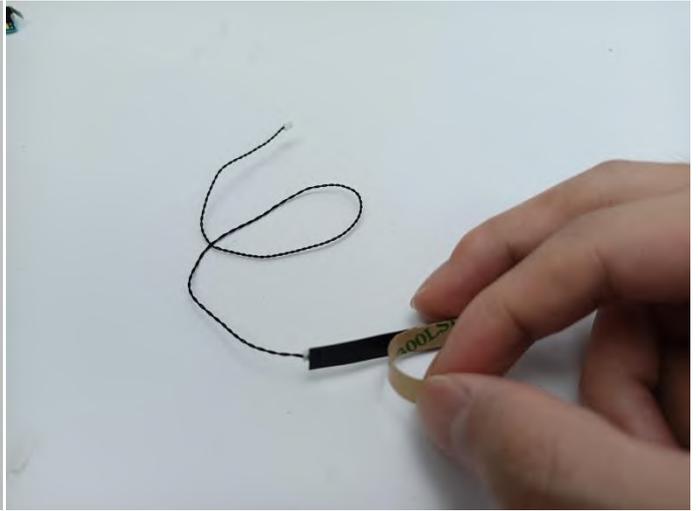
138



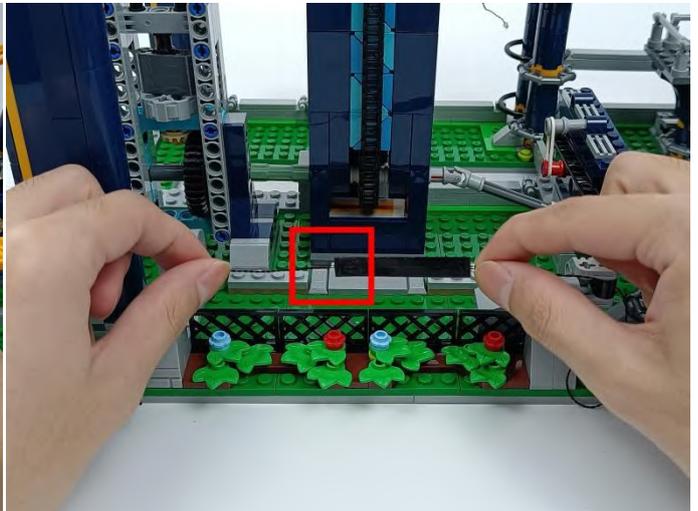
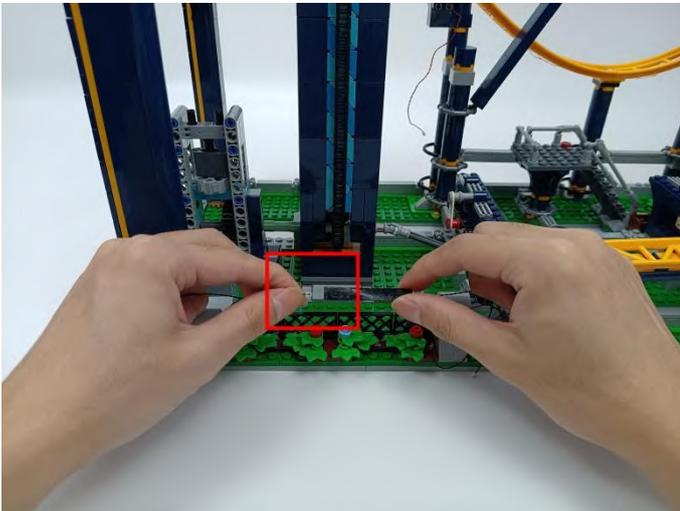
139



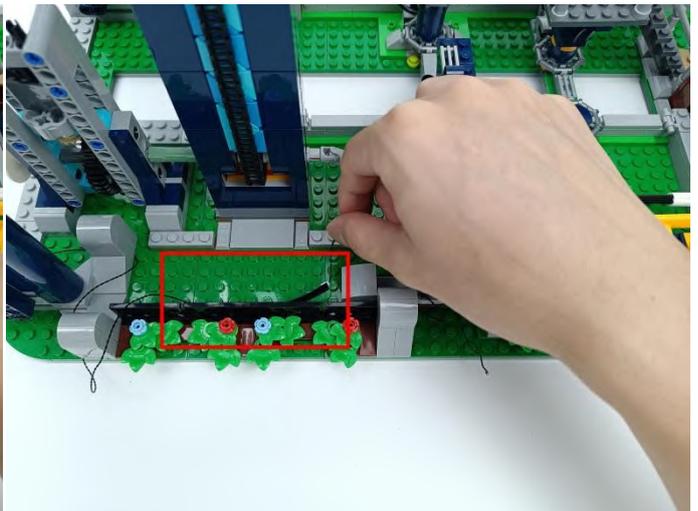
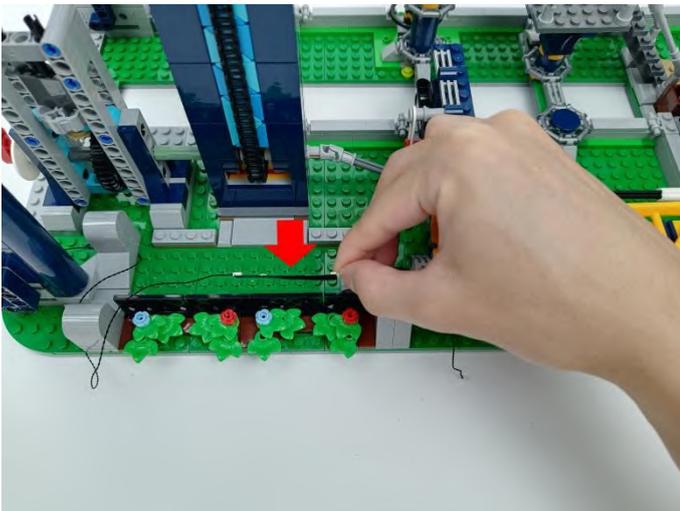
140



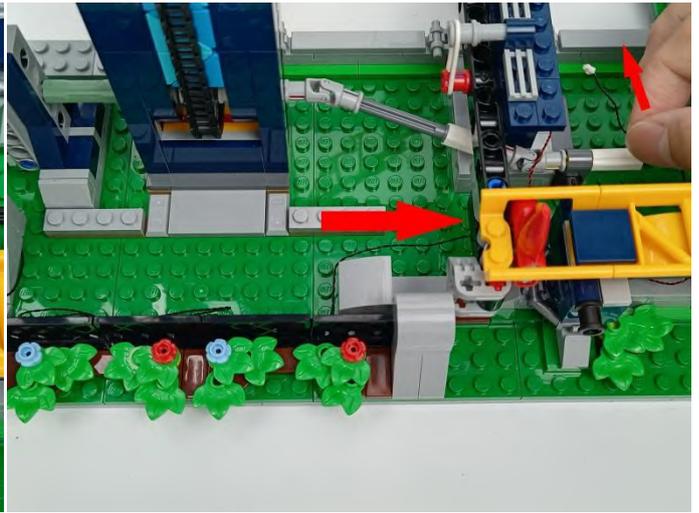
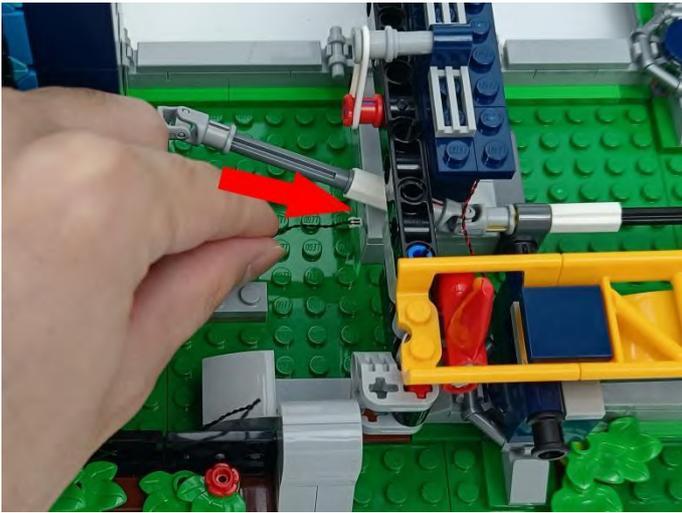
141



142



143



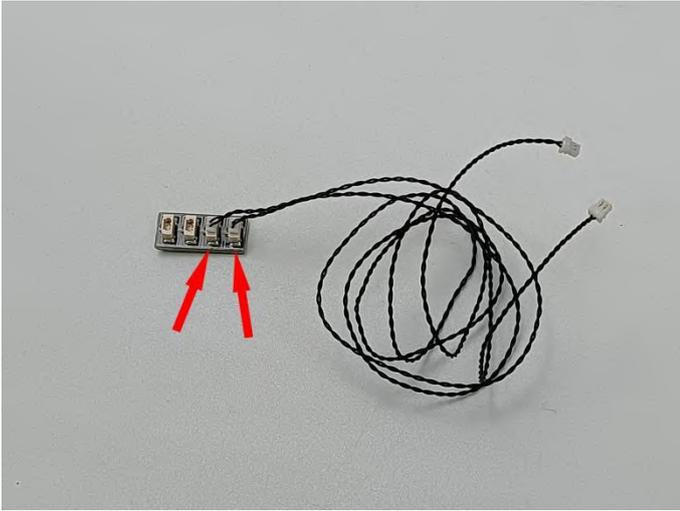
144



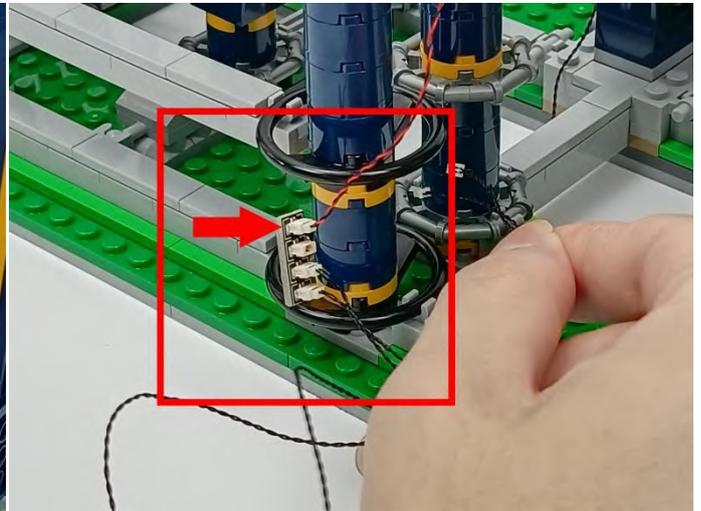
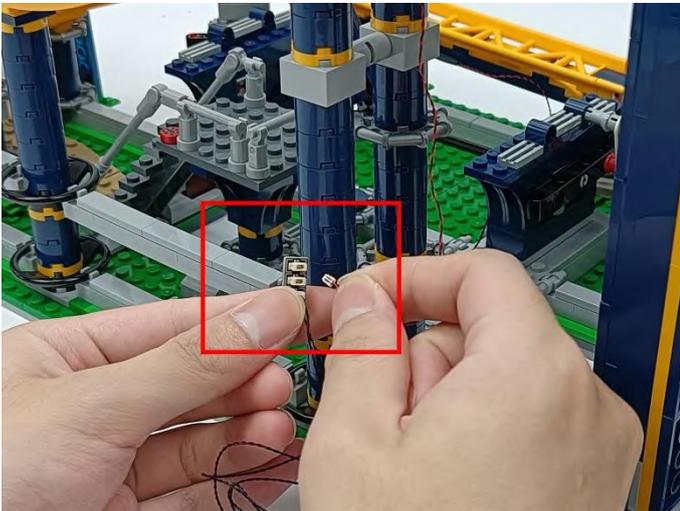
145



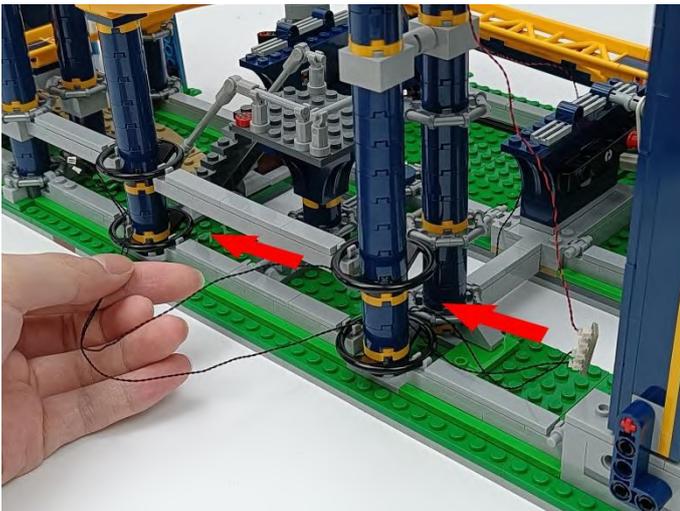
146



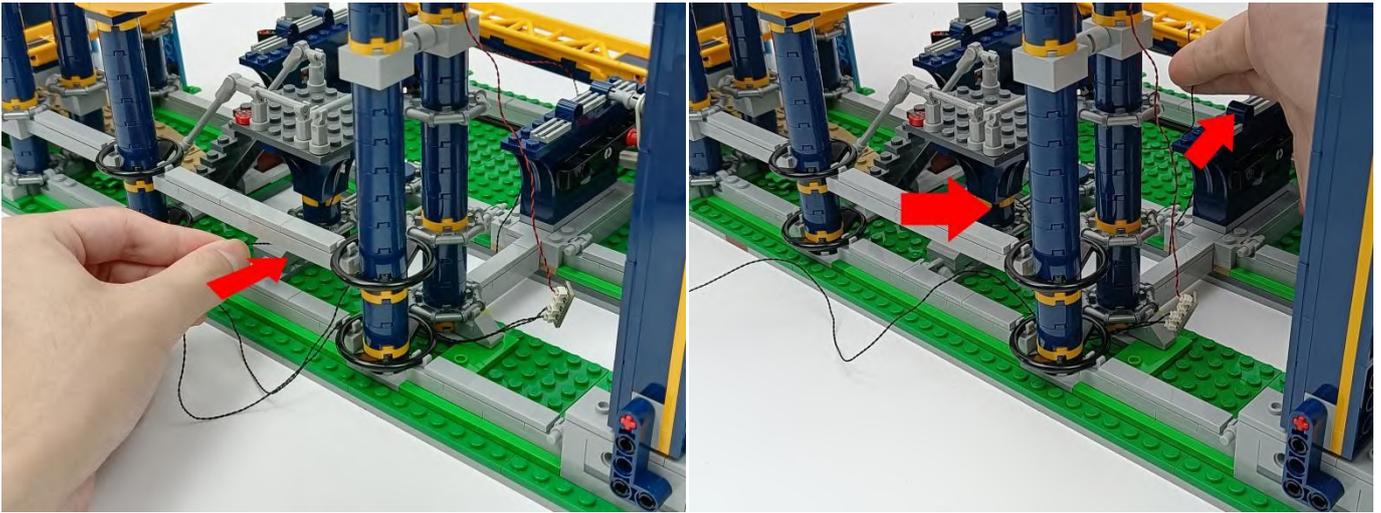
147



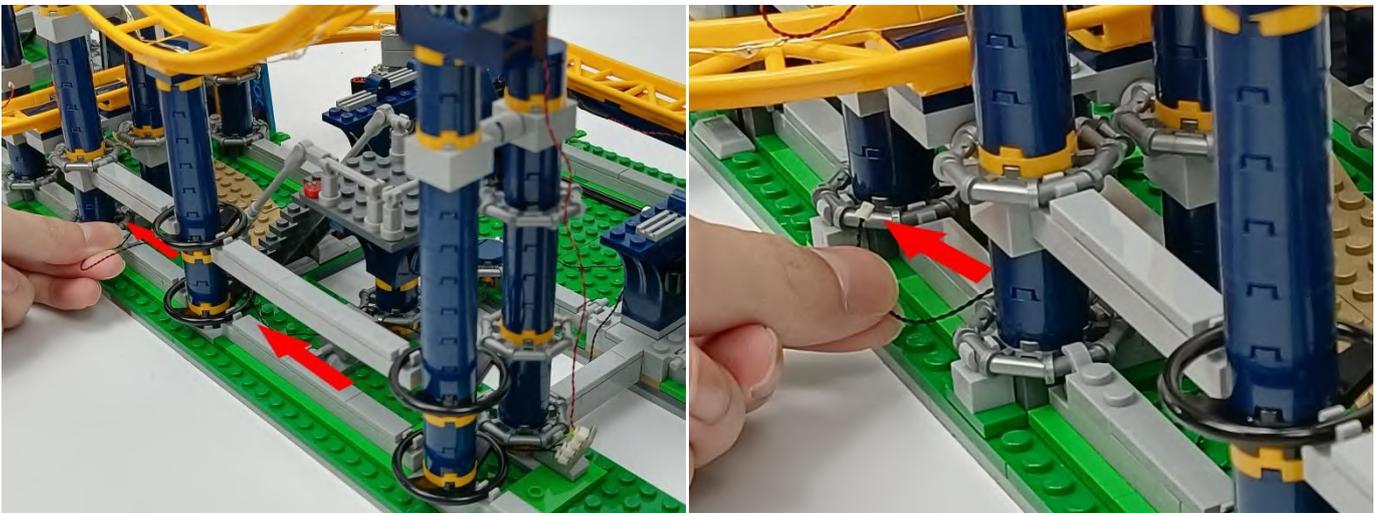
148



**Pull one of the black connecting wires to the right.**



**150**



**151**



152



153



154



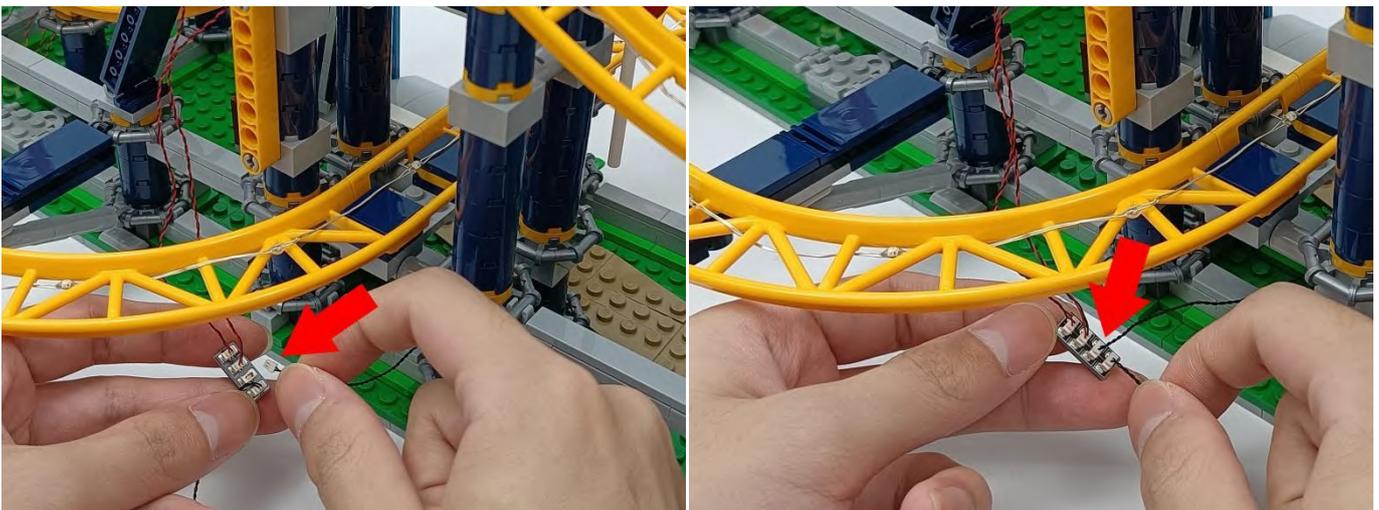
155



156



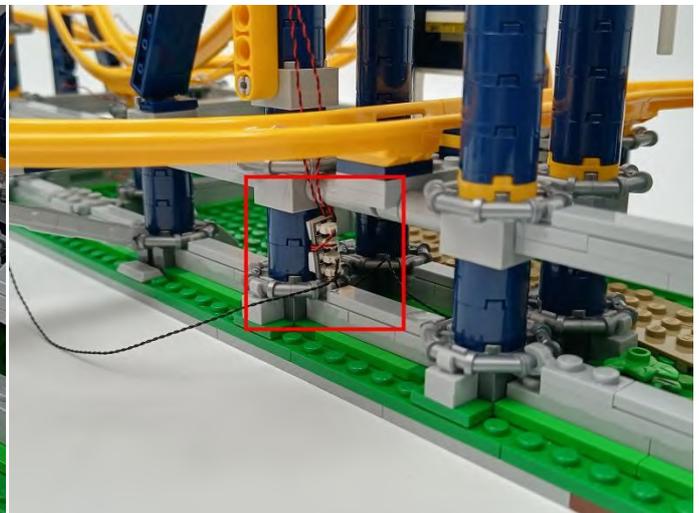
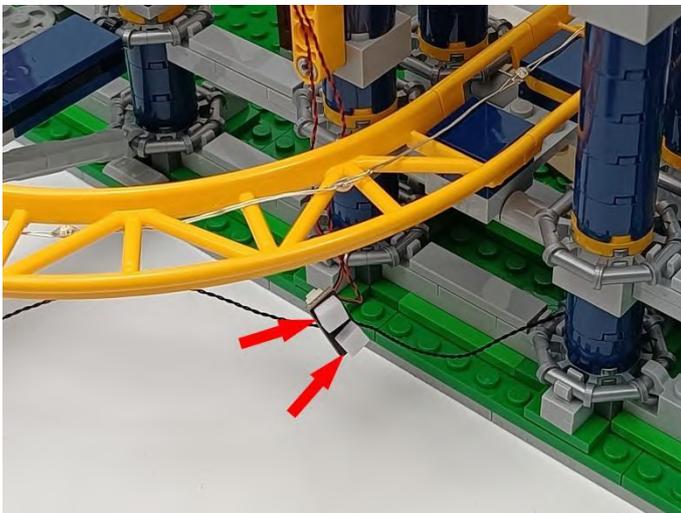
**Connect the black cable you just pulled to the expansion board.**



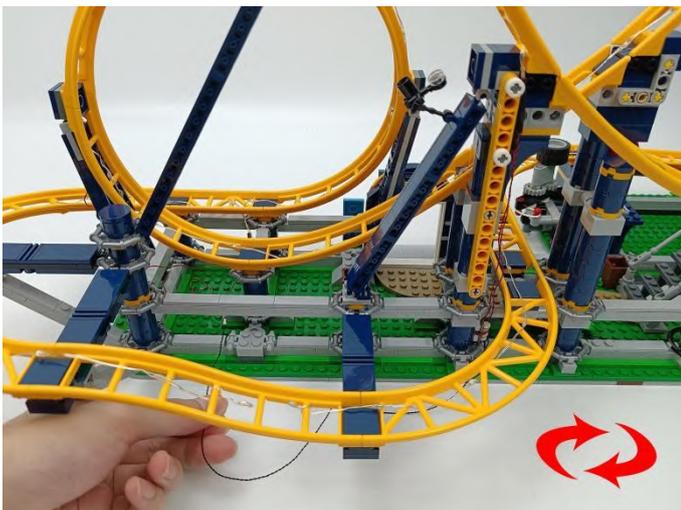
157



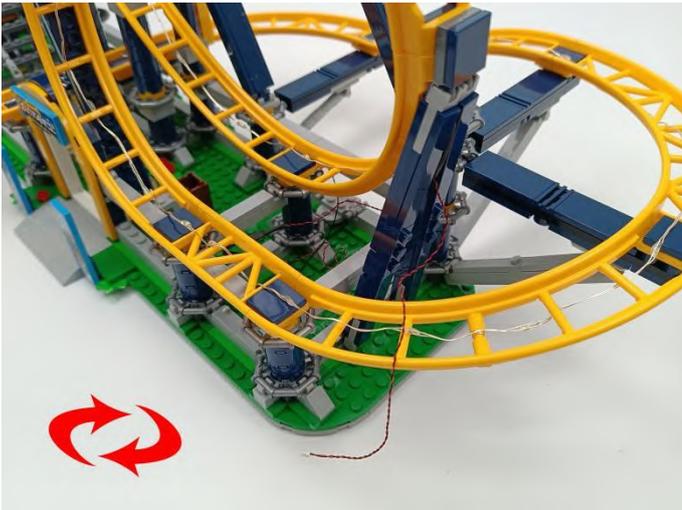
158



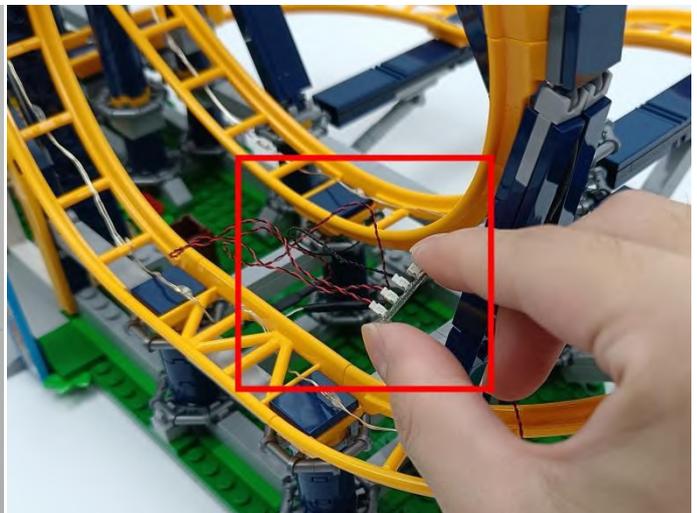
159



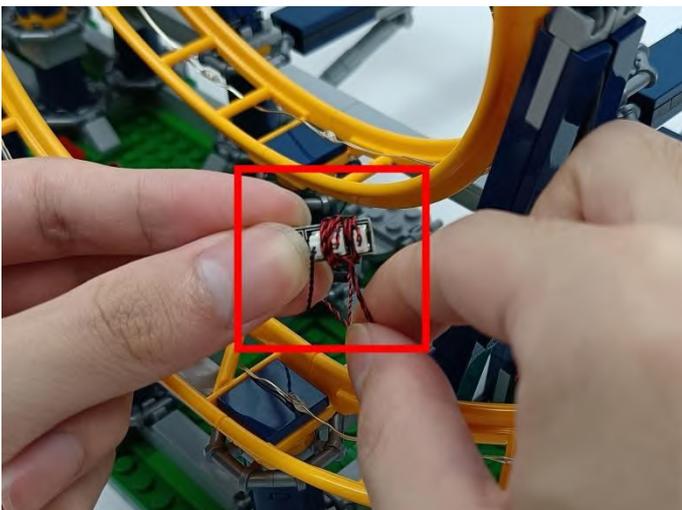
160



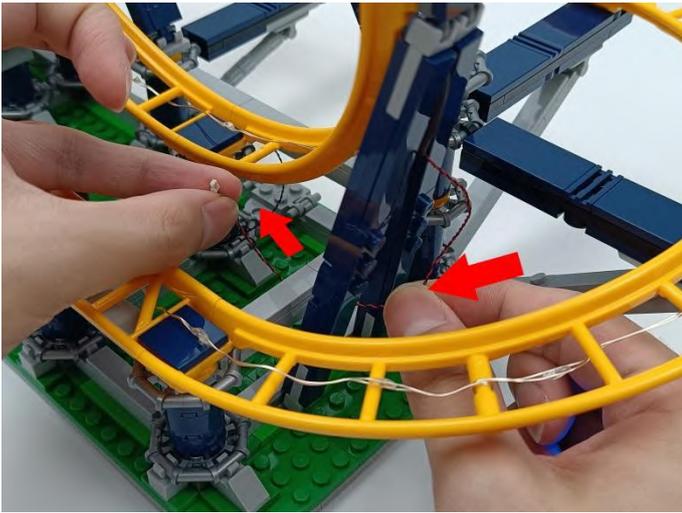
161



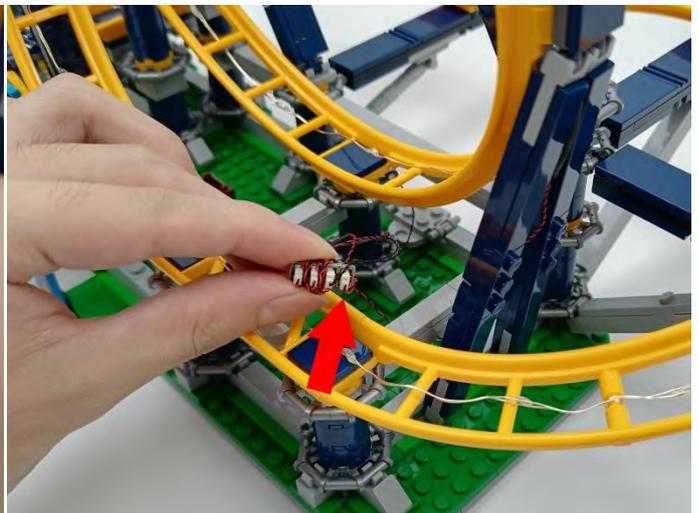
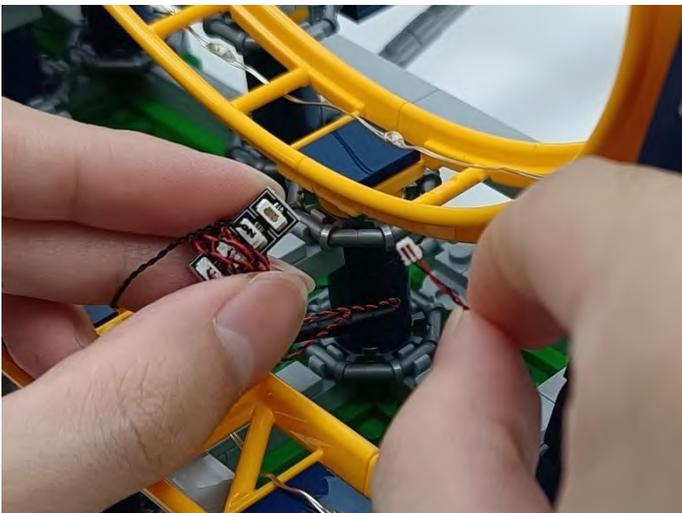
**Wrap the lighting wire around the expansion board.**



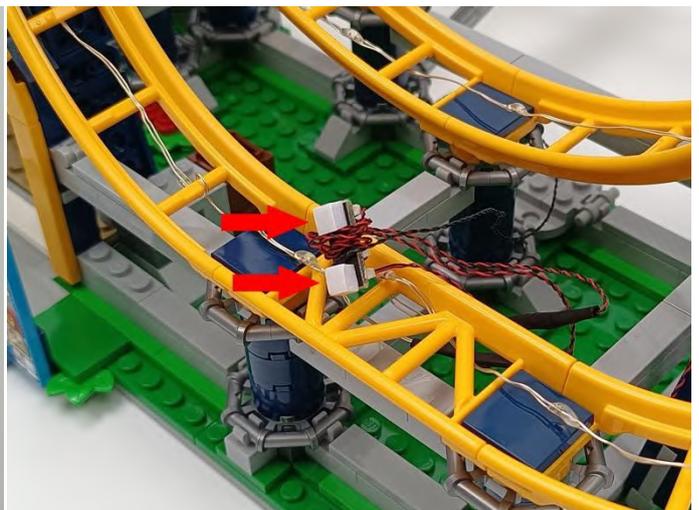
162



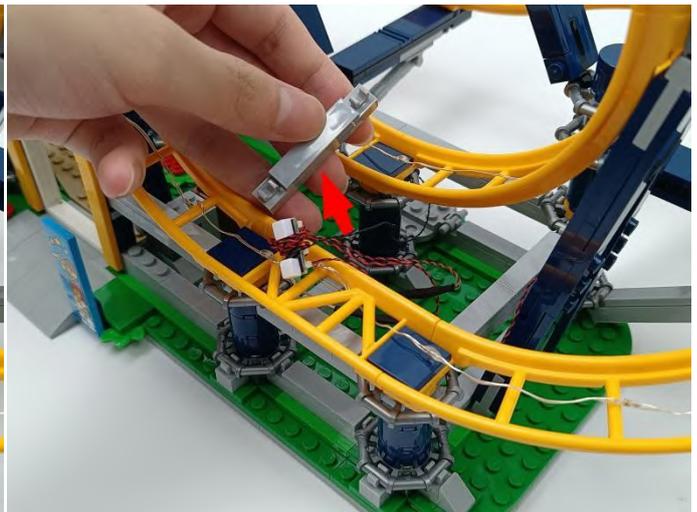
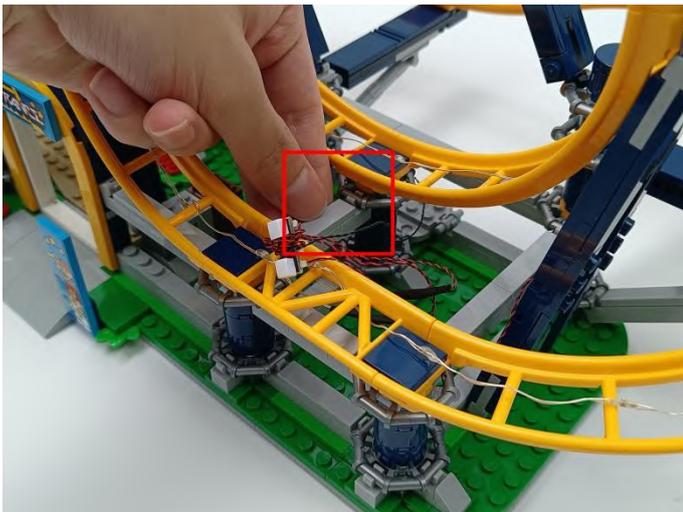
163



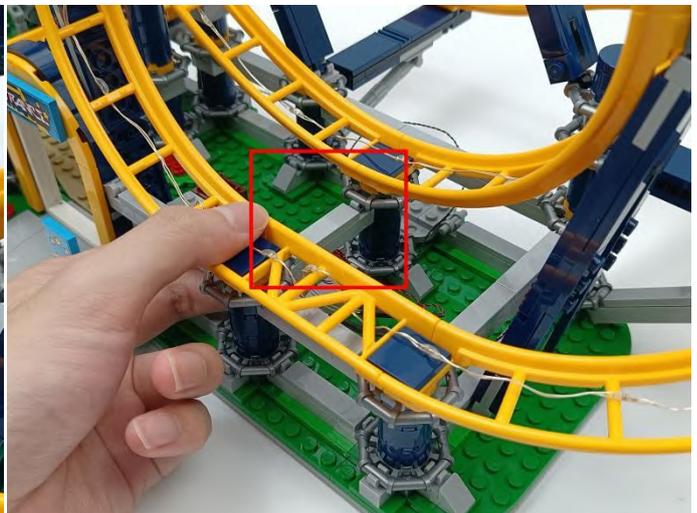
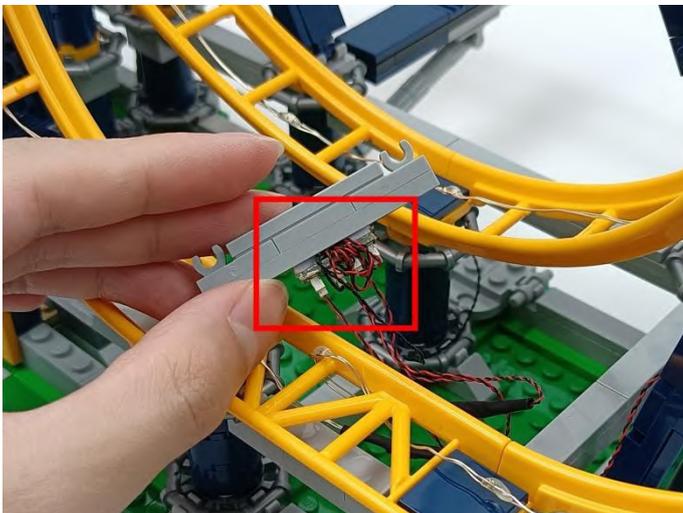
164



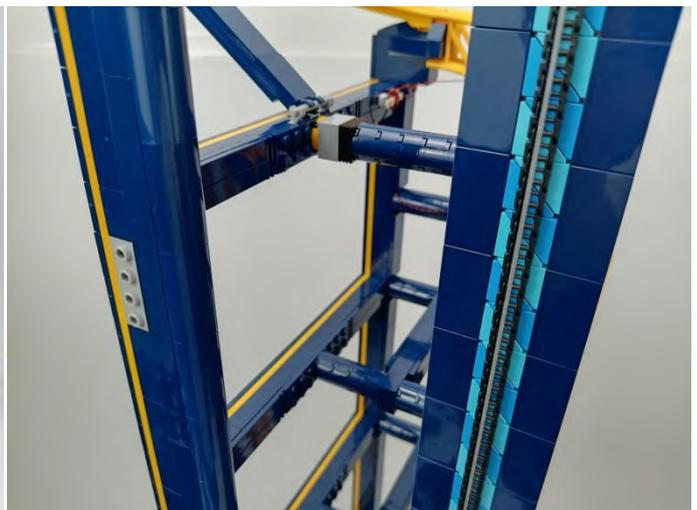
165



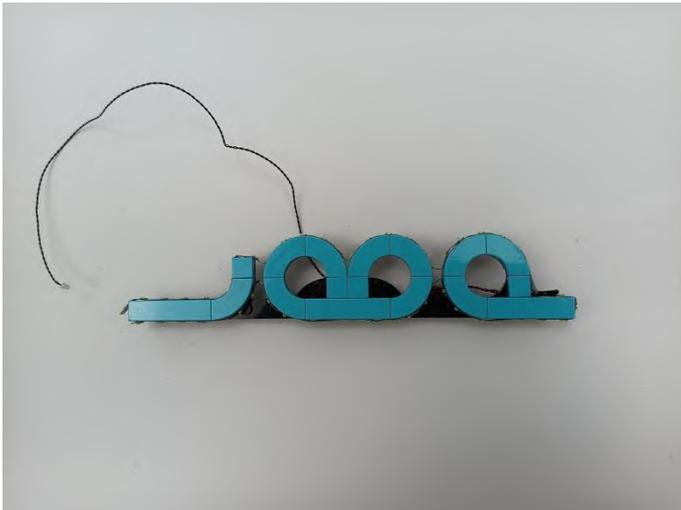
166



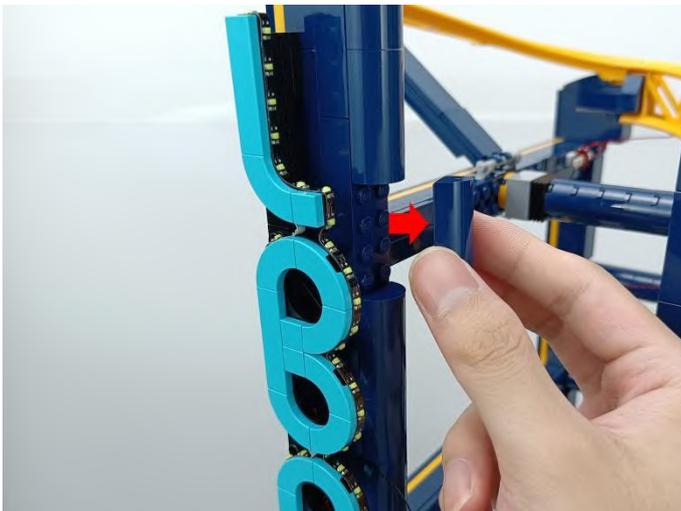
167



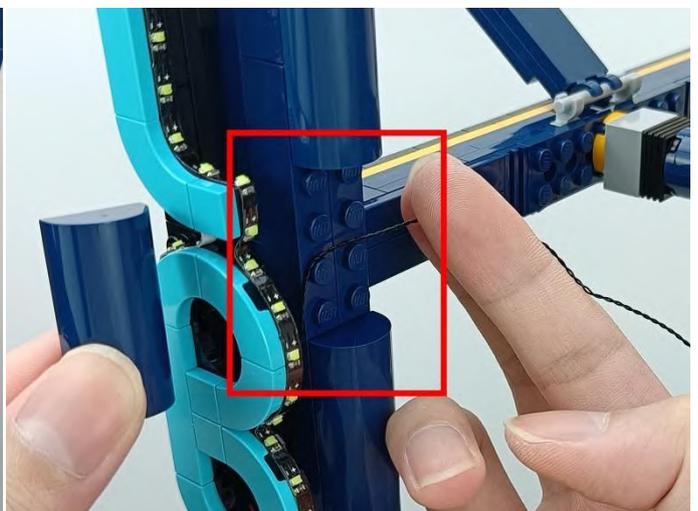
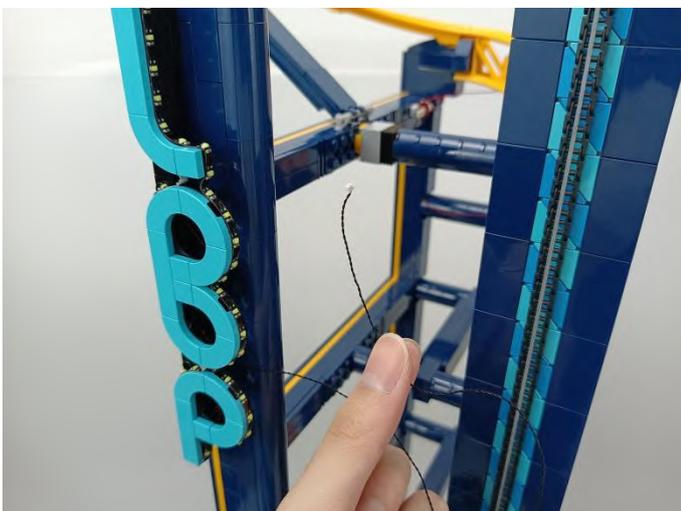
168



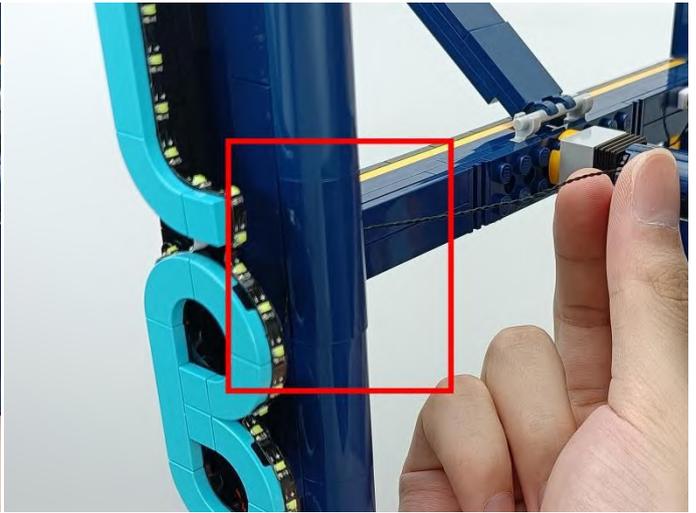
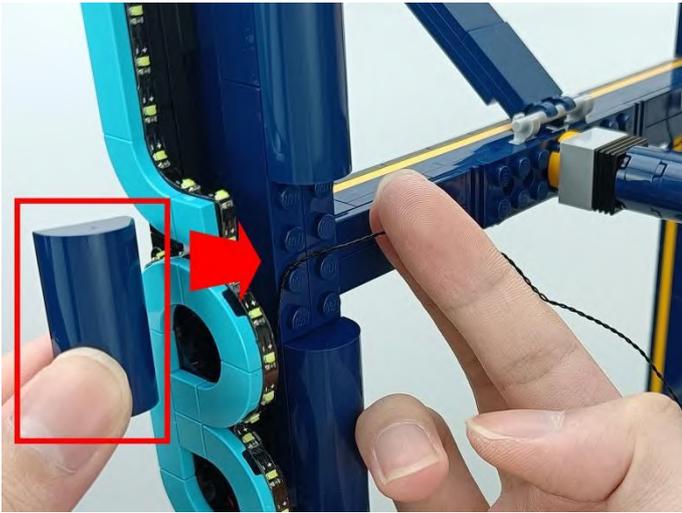
169



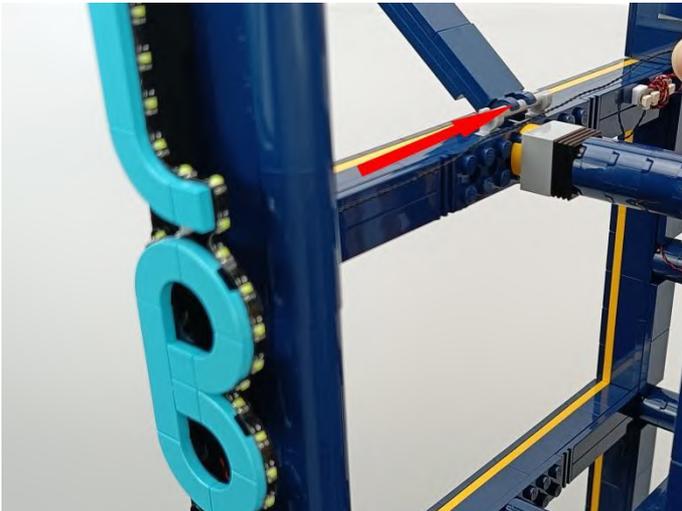
170



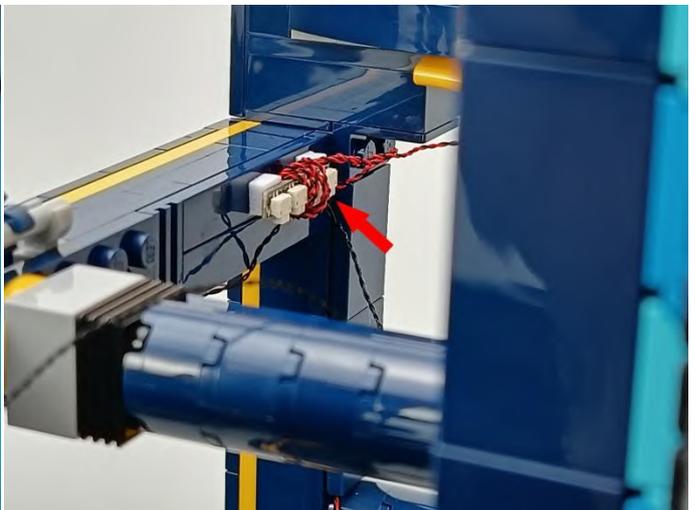
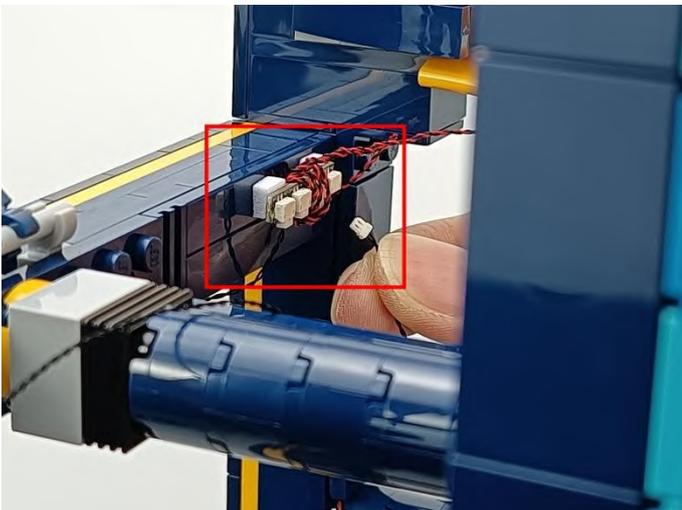
171



172



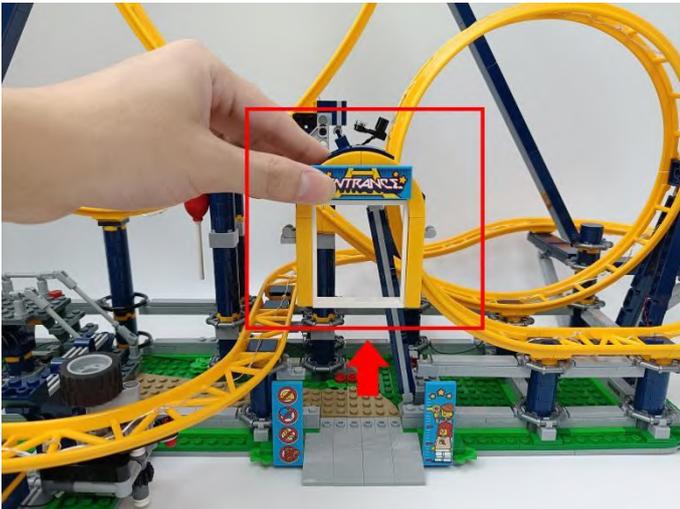
173



174



175



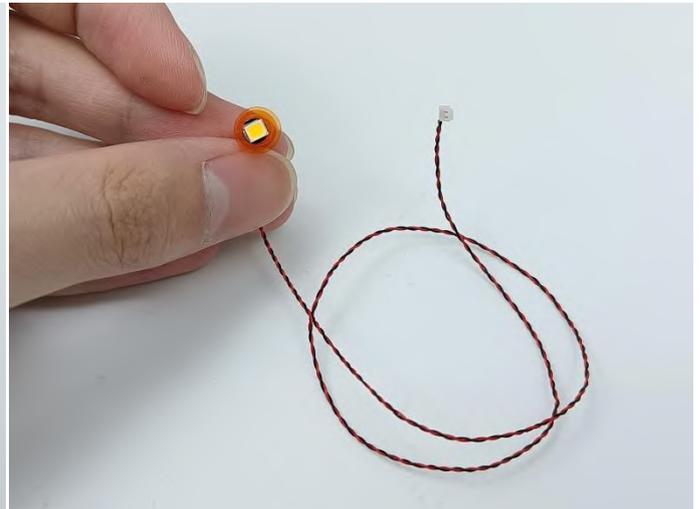
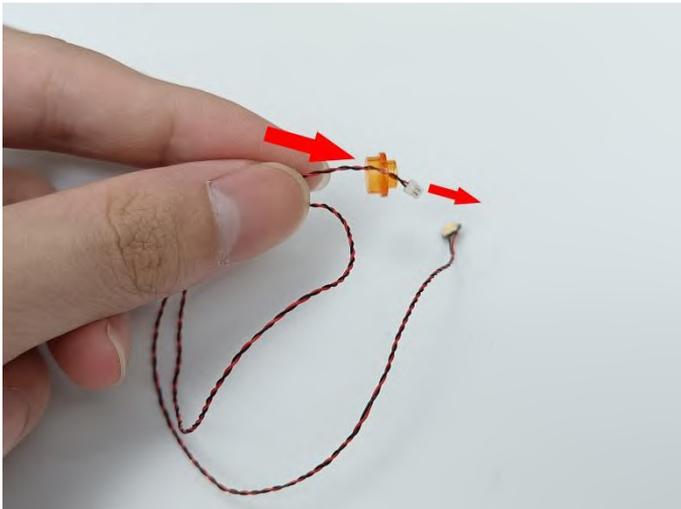
176



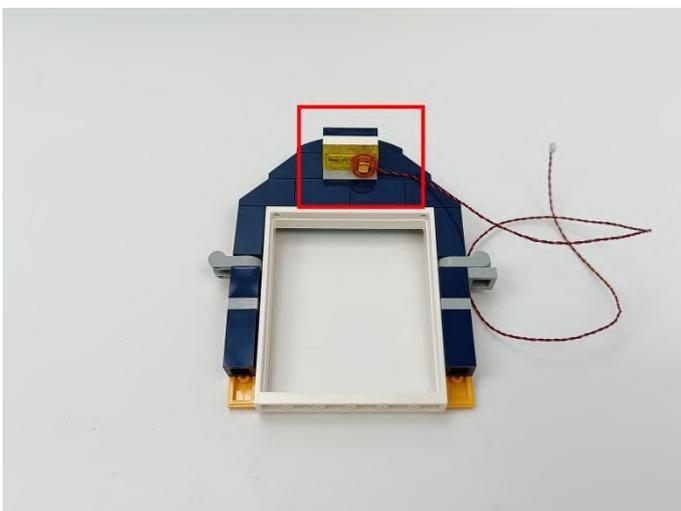
177



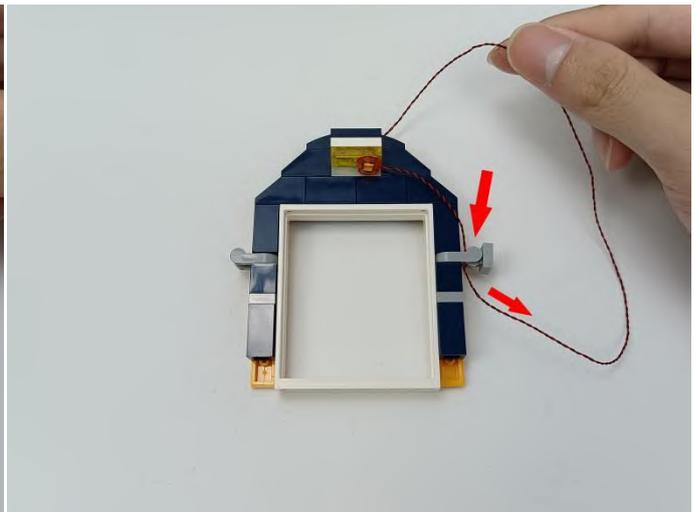
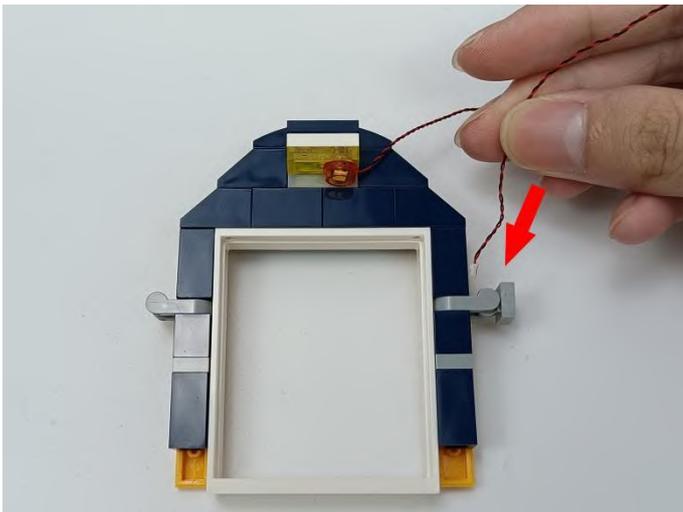
178



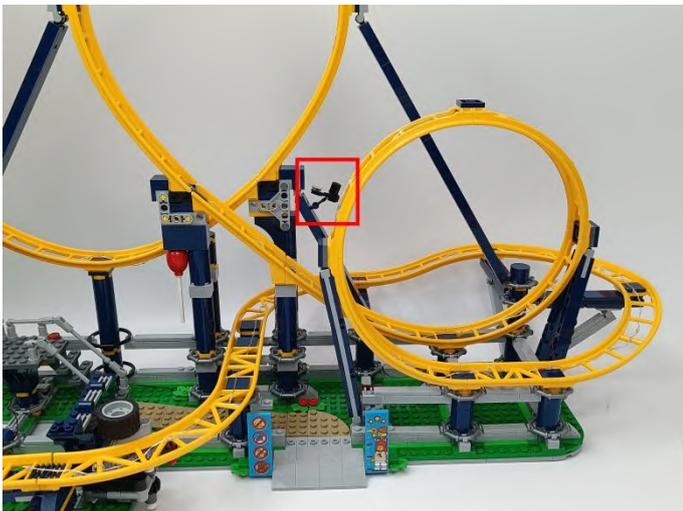
179



180



181



182



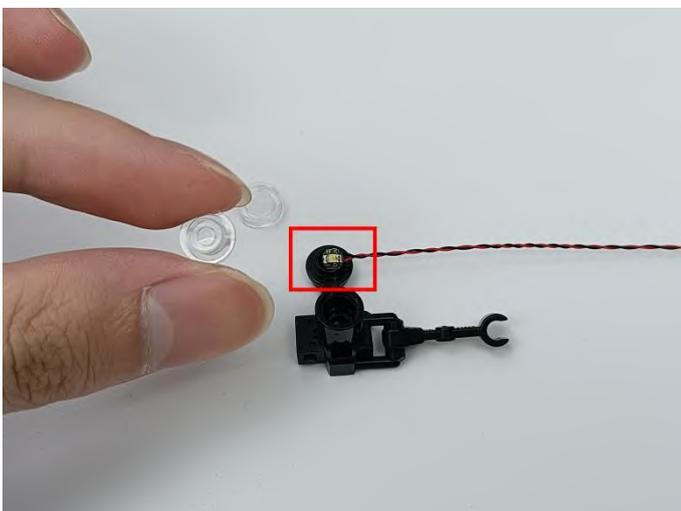
183



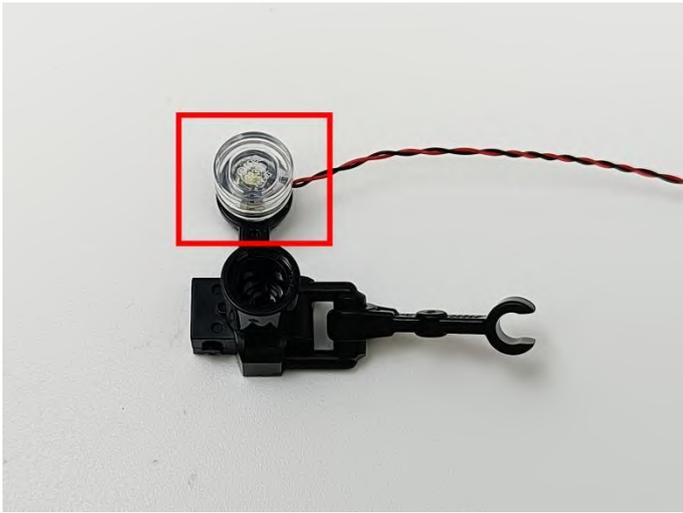
184



185



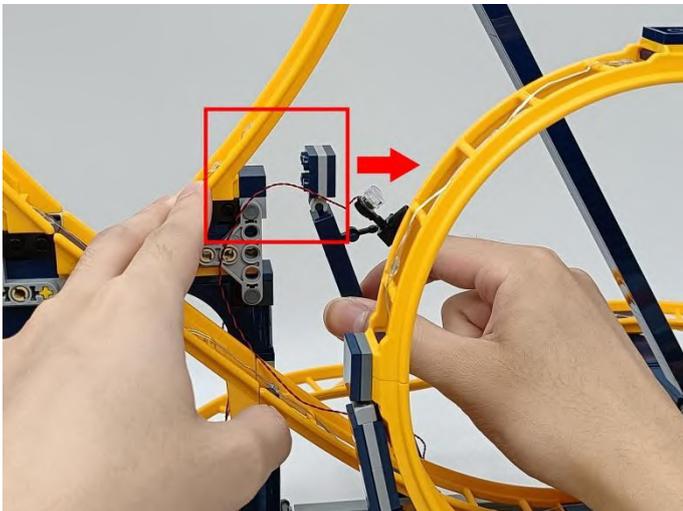
186



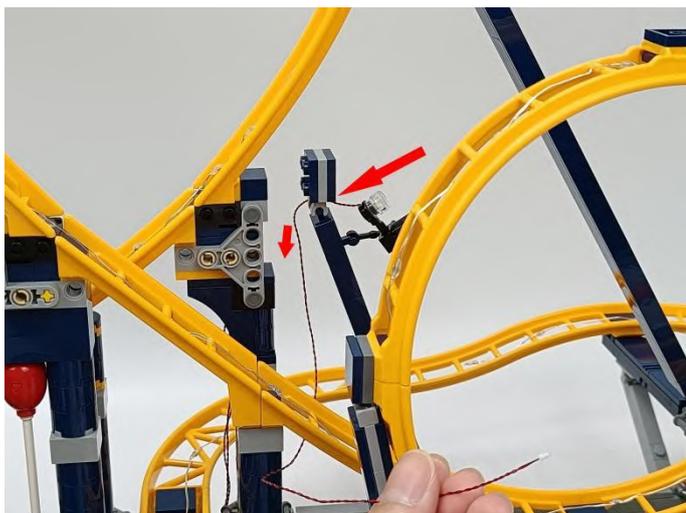
187



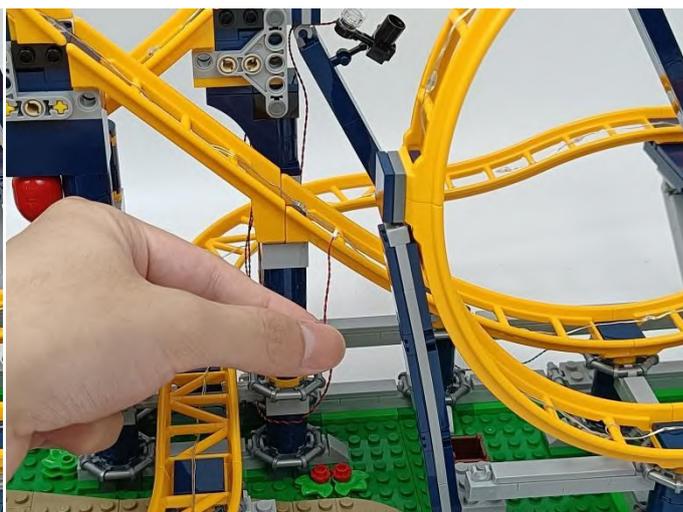
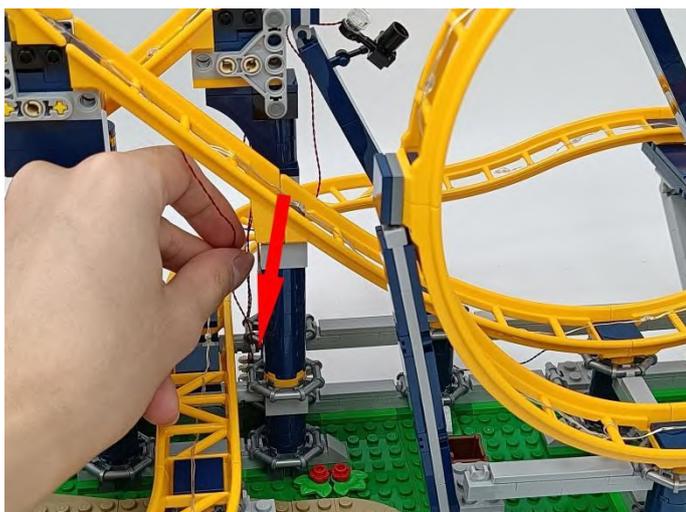
188



Pass the lighting wire through the position in the picture. Then restore the building blocks.



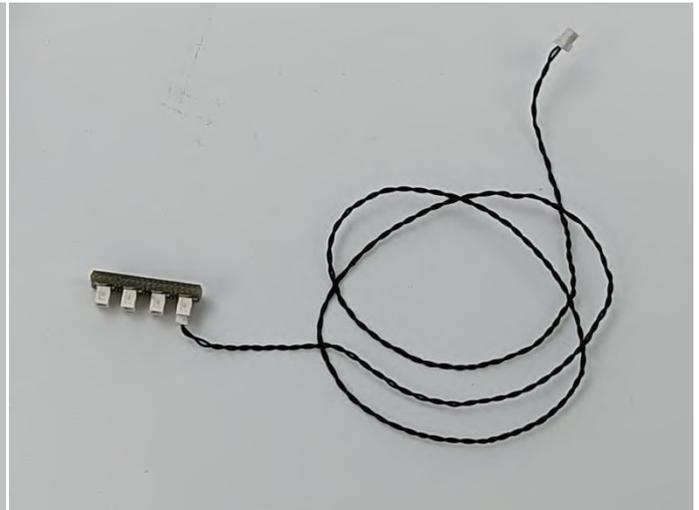
189



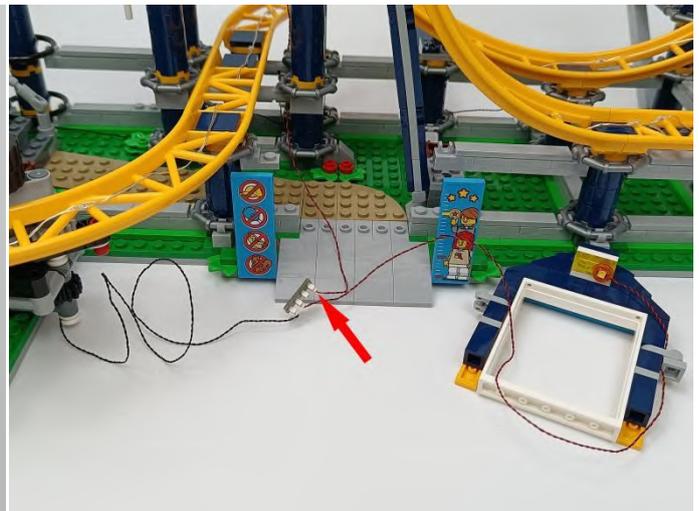
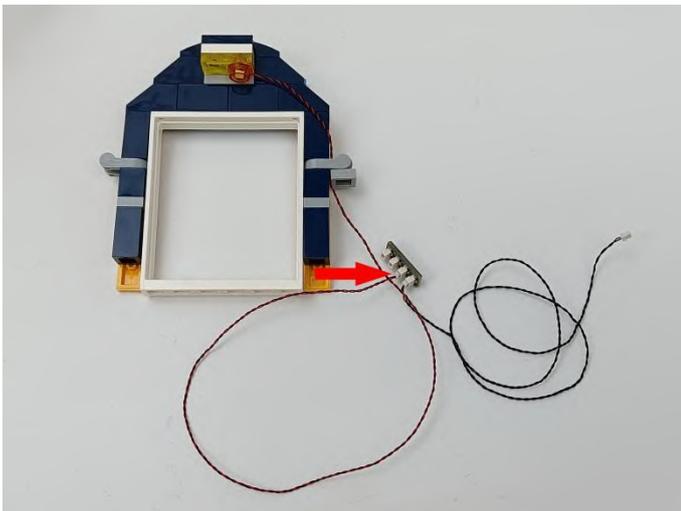
190



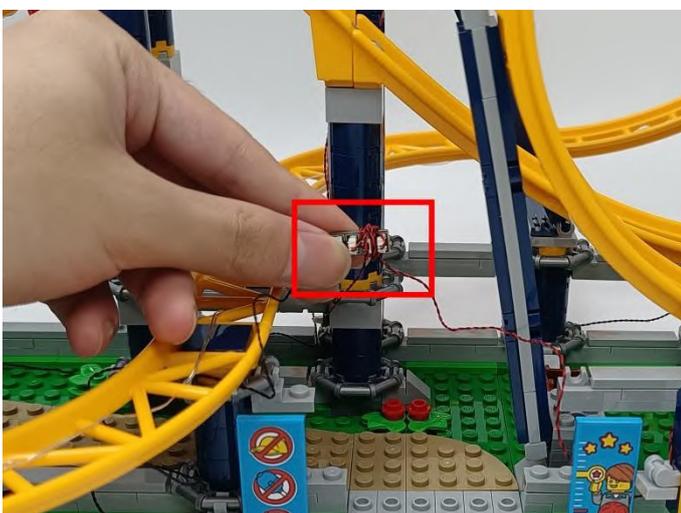
191



192



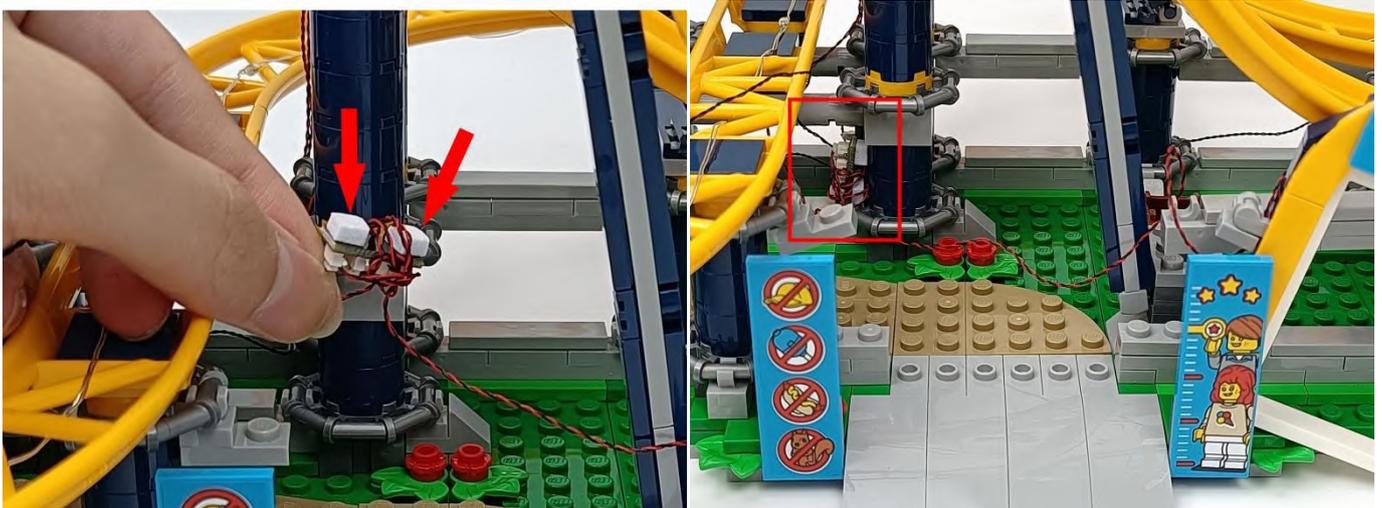
**Excessive lighting wire is wrapped around the expansion board.**



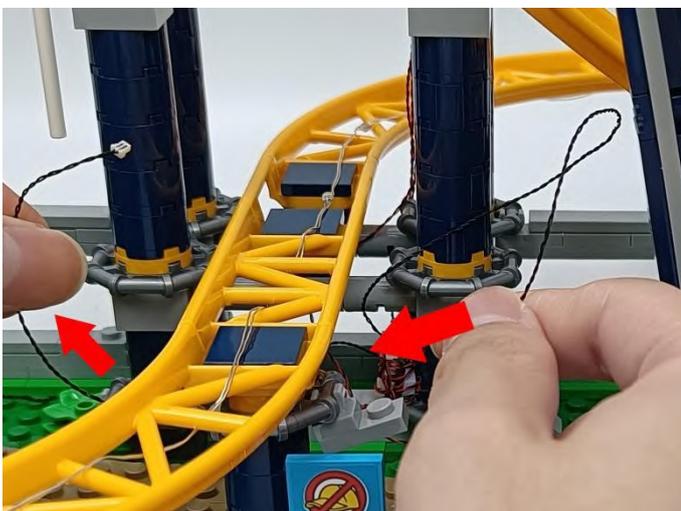
193



194



195



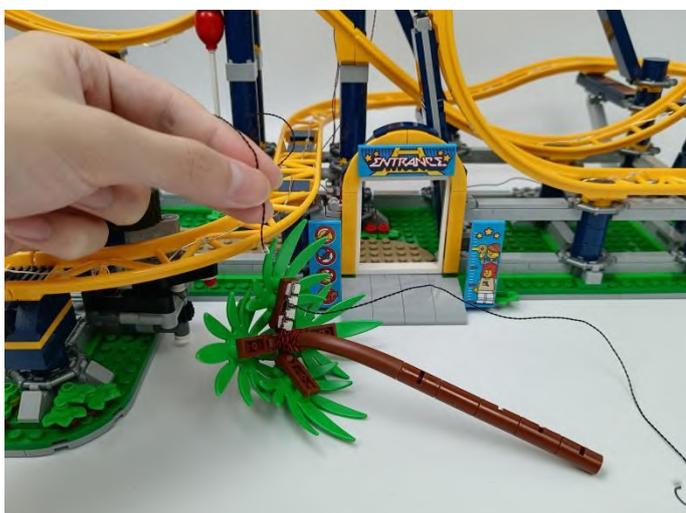
196



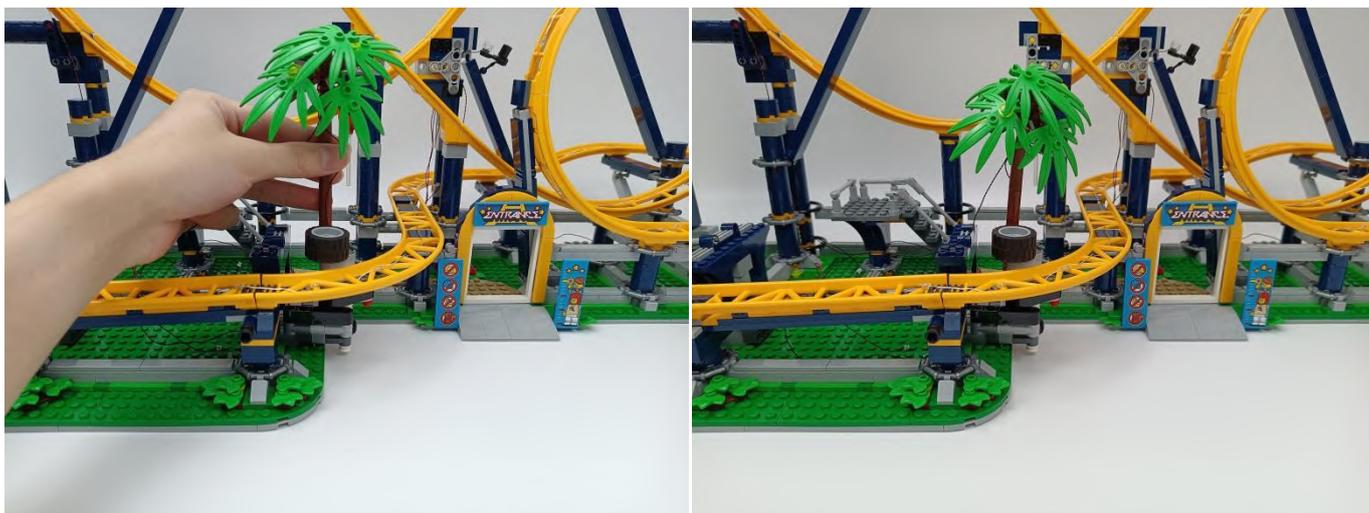
197



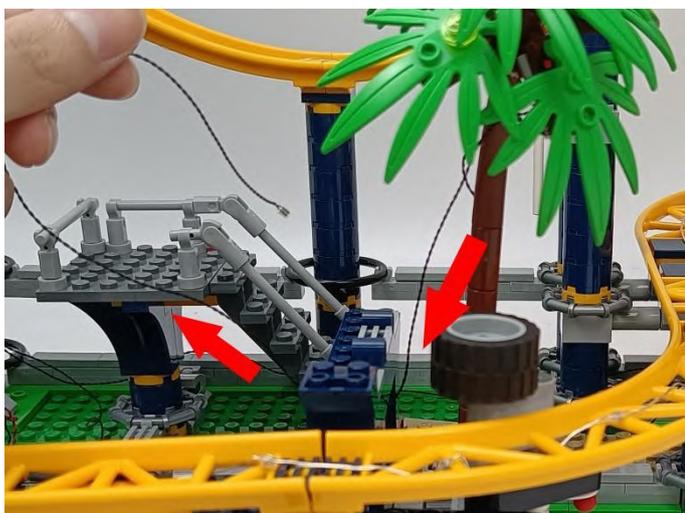
**Connect the black cable just now to the expansion board.**



198



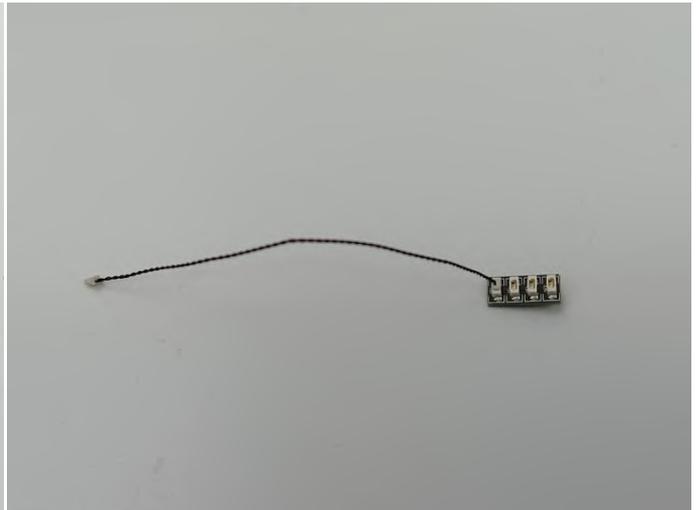
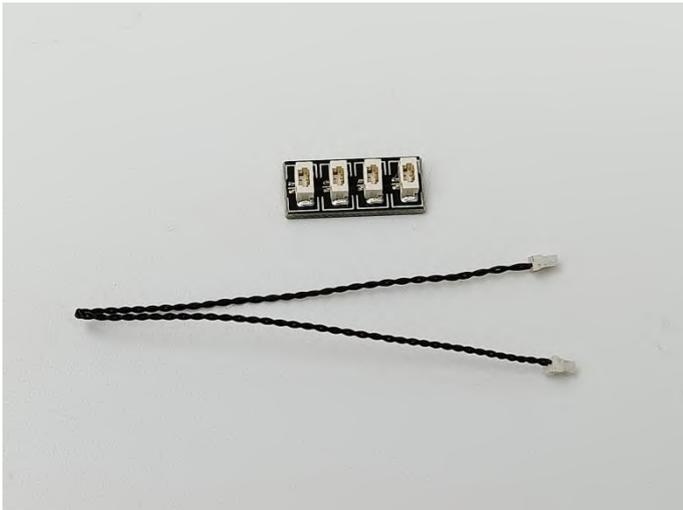
The black line of the tree is pulled to the left.



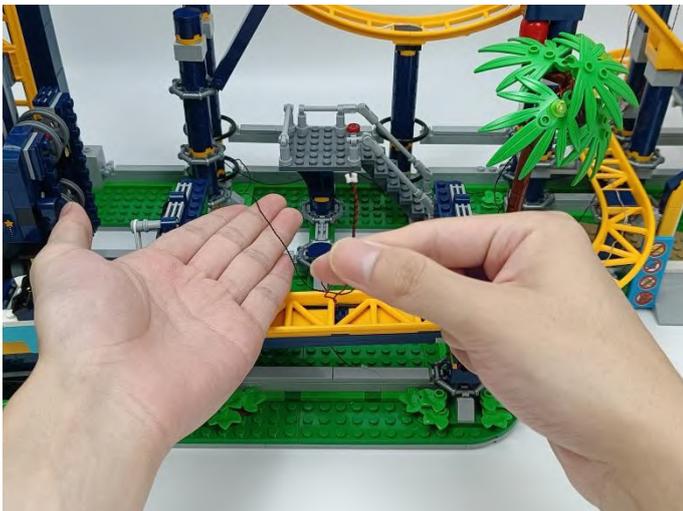
199



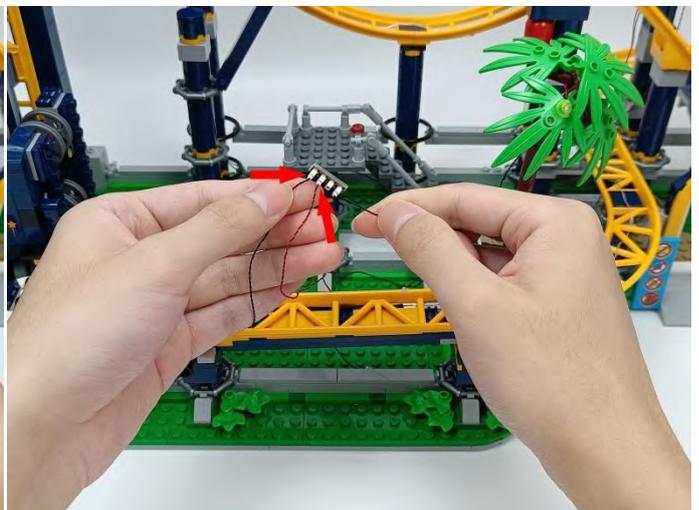
200



201



202



# 203



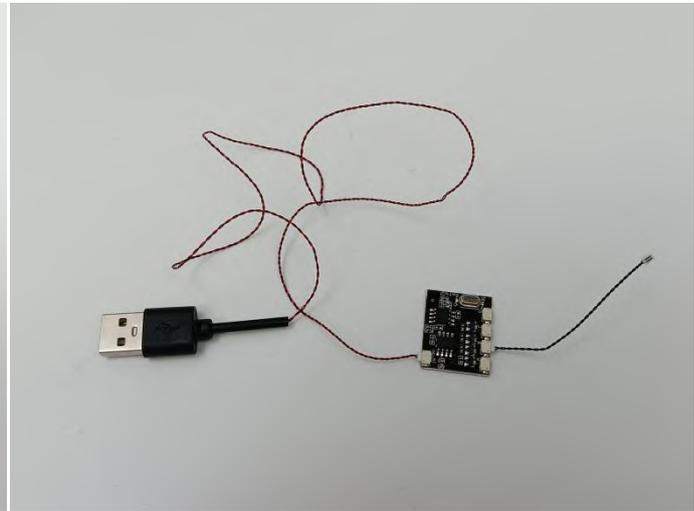
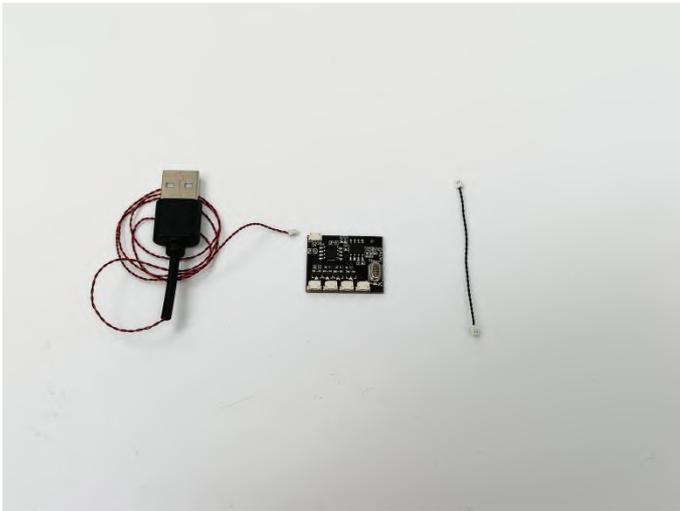
**Remote control function description**

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  
 ↓: Increase blinking/breathing rate  
 Brightness+: Increase brightness  
 Brightness -: Reduce brightness

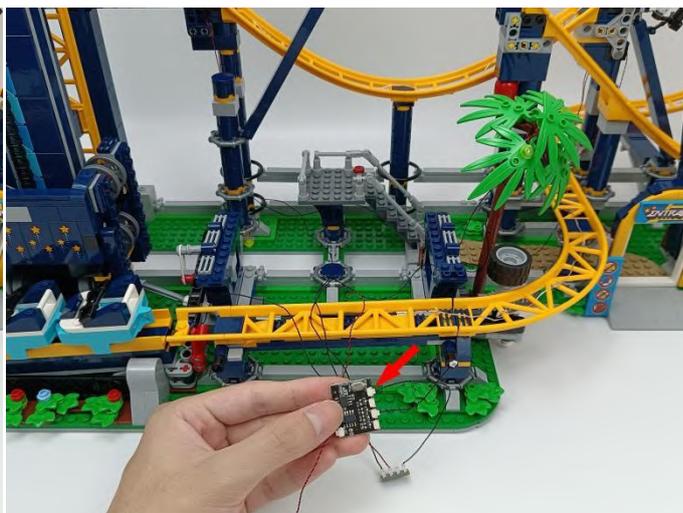
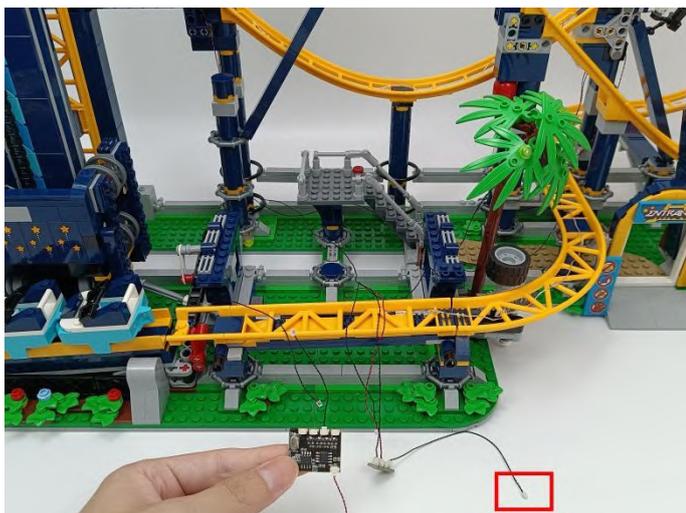
# 204



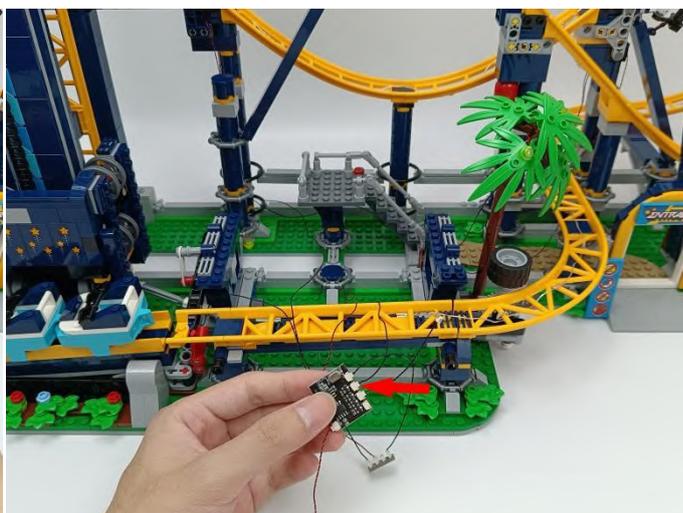
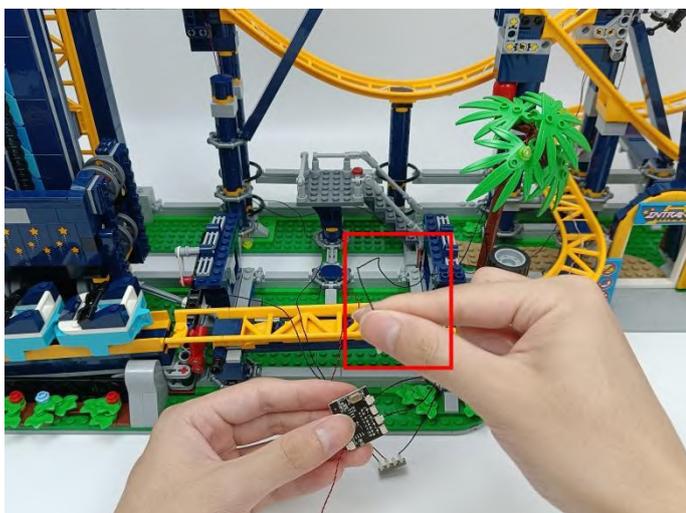
# 205



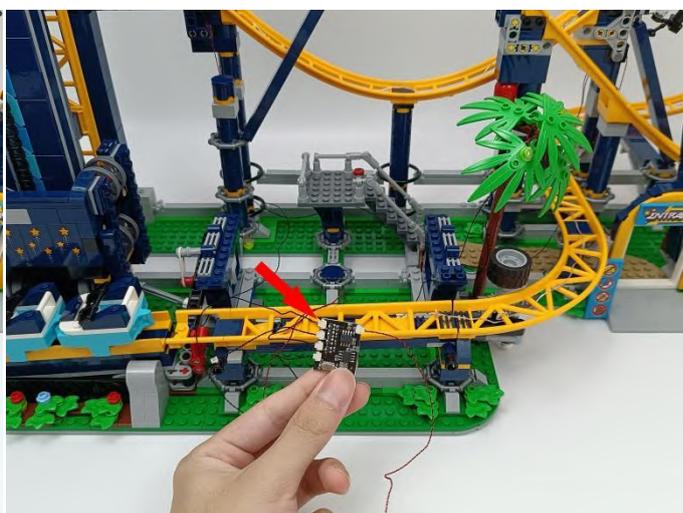
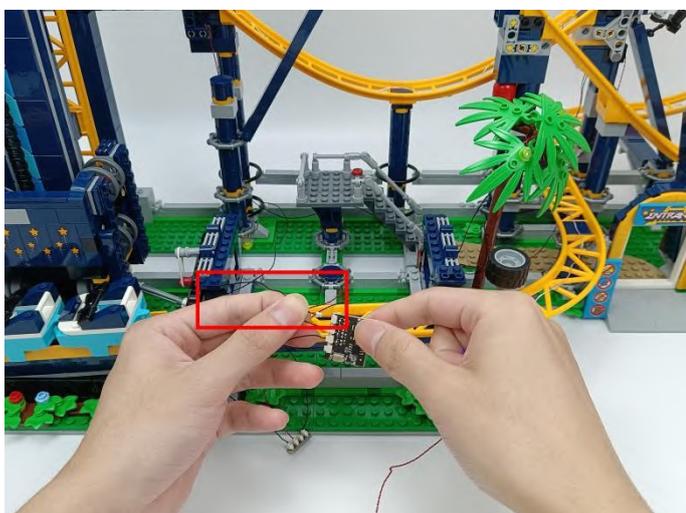
206



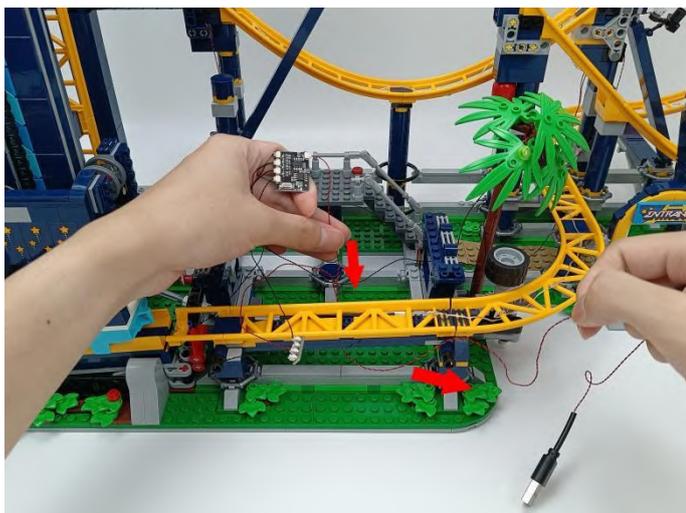
207



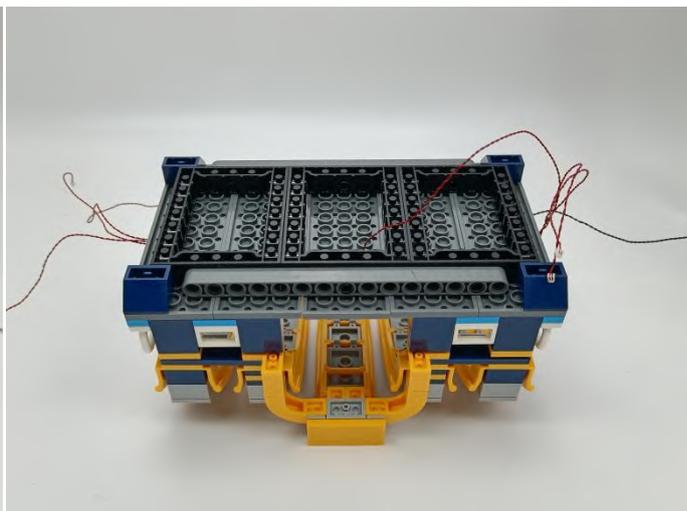
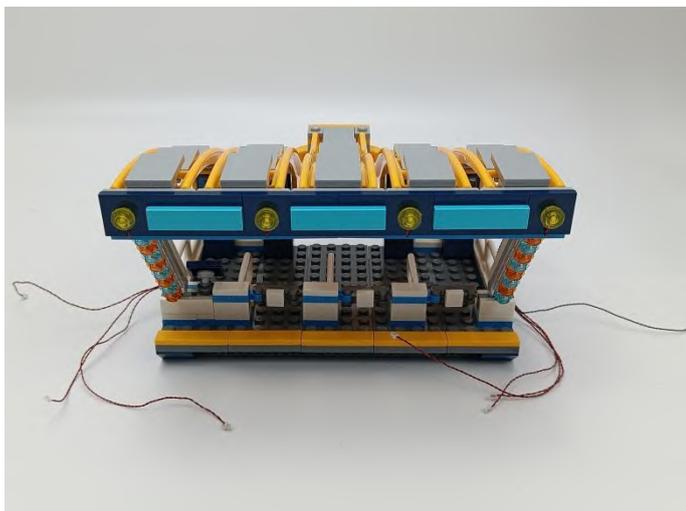
208



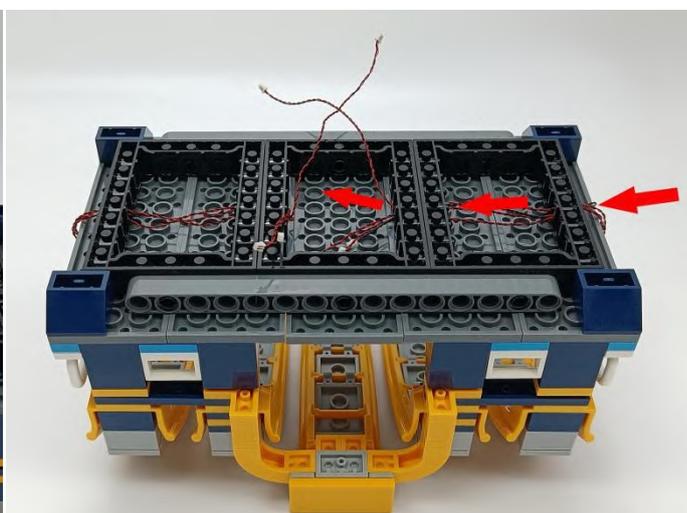
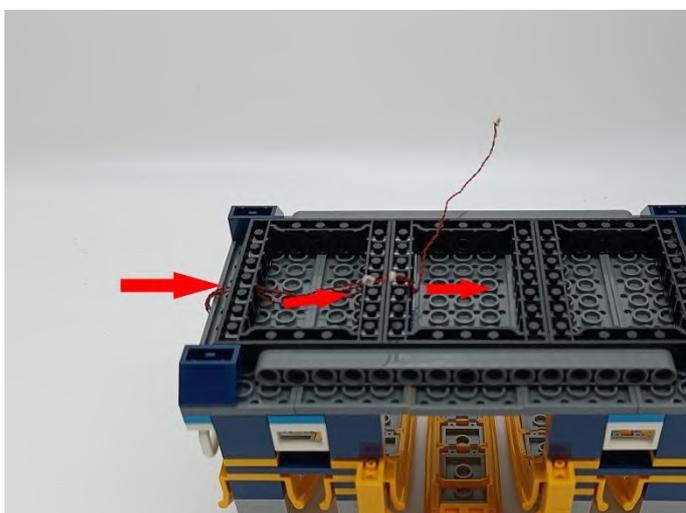
209



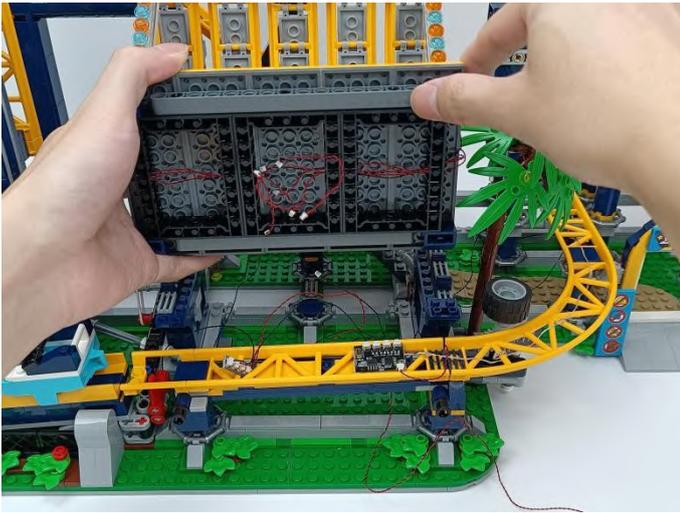
210



211



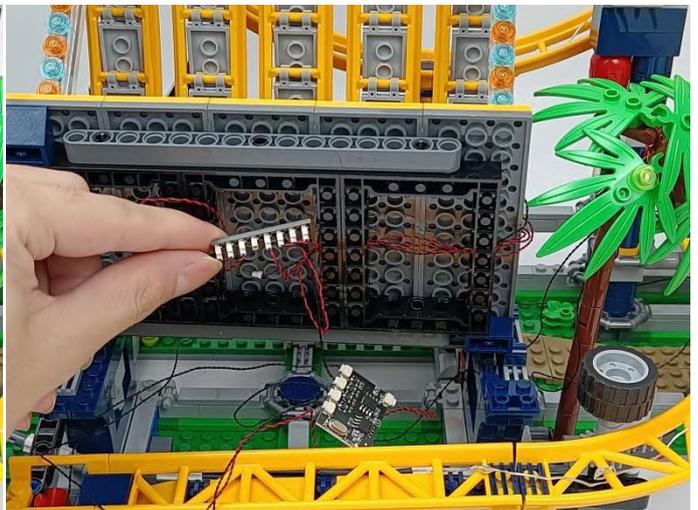
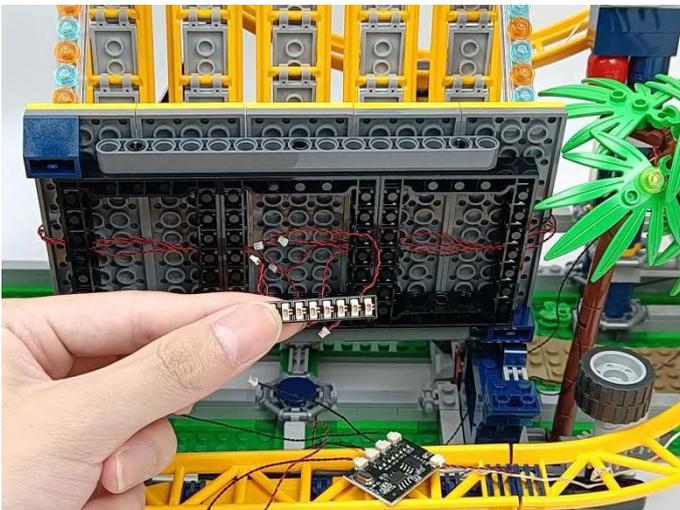
212



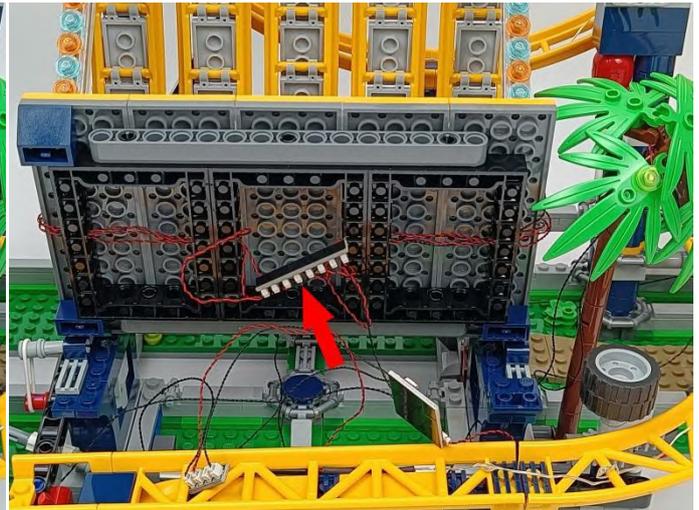
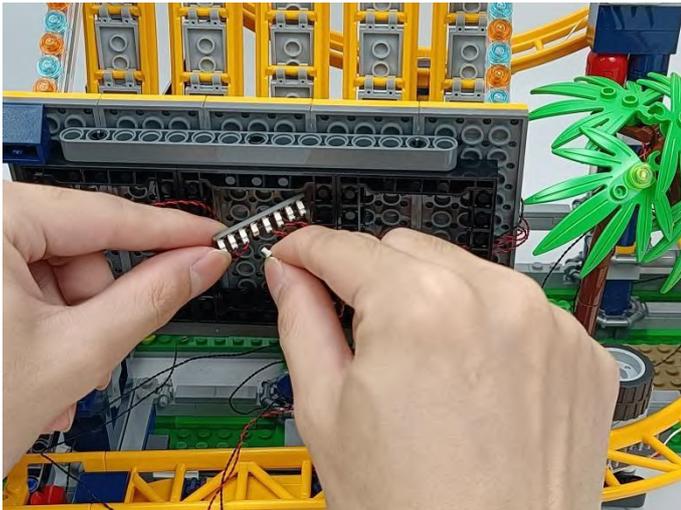
213



214



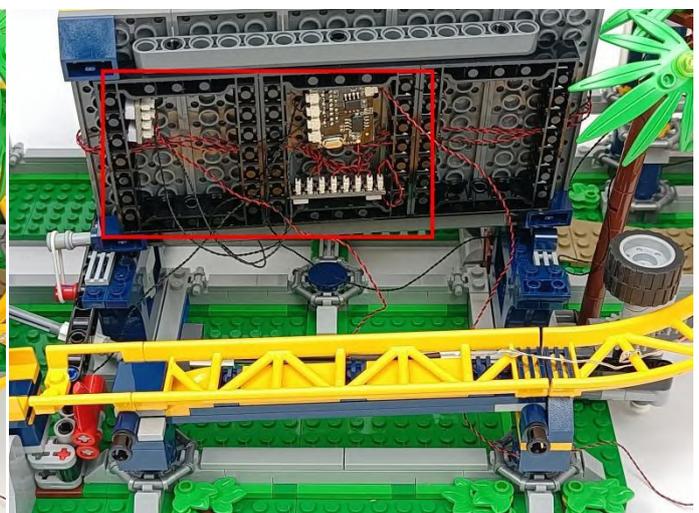
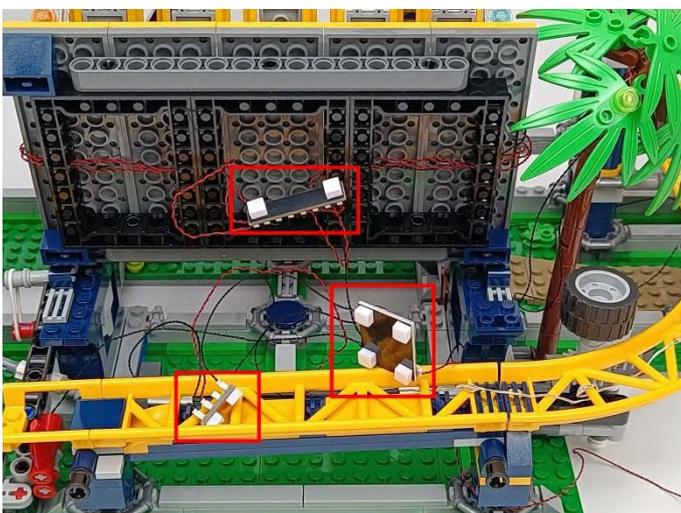
The 5cm cable on the module is connected to the expansion board.



215



216





**Please buy batteries.**

**The remote control does not contain batteries, please buy a 2025 or 2032 button battery in the nearest store and install it in the remote control.**



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



**The battery box can also power the set. If it is necessary to change the power supply , prepare three AAA batteries, install them in the battery box, turn on the switch on the battery box, remove the plug of the USB Power Cable from the socket of the expansion board,plug the plug of the battery box to the same socket in the expansion board to power the suit as well.**

**THANKS**