

# 10247 Ferris Wheel P58

- **P58 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 “10247 P58”.**
- **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 10 bags in this set. The name and quantities of specific components are as shown , please check carefully.**

Label	Content	Quantity
LED Strip Lights-Warm White	LED Strip Lights-Warm White	3
Expansion Board	6 Socket Expansion Board	1
	8 Socket Expansion Board	1
USB Power Cable	USB Power Cable-30CM	1
AA Battery Box	AA Battery Box	2
Connecting Cables-5CM	Connecting Cables-5CM	1
Connecting Cables-15CM	Connecting Cables-15CM	1
Connecting Cables-30CM	Connecting Cables-30CM	1
Flashing Bit Lights-15CM-Warm White	Flashing Bit Lights-15CM-Warm White	2
Multi-Colour Light String	Multi-Colour Light String	6
Parts package		

**Please contact us immediately if there have any missing components.**

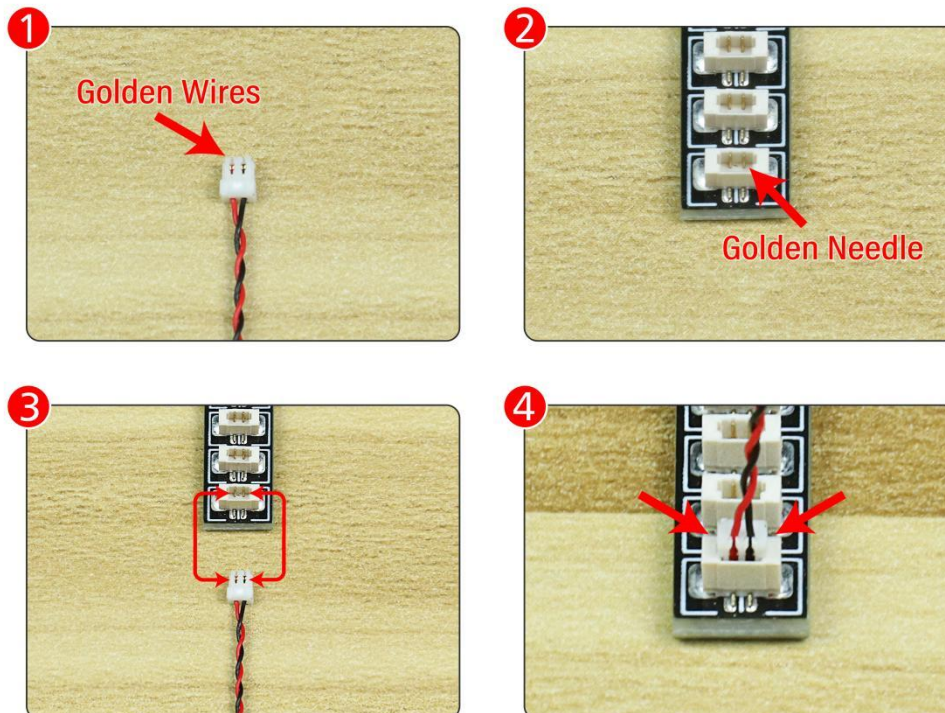
## Section B: Test that each components is working properly.

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



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

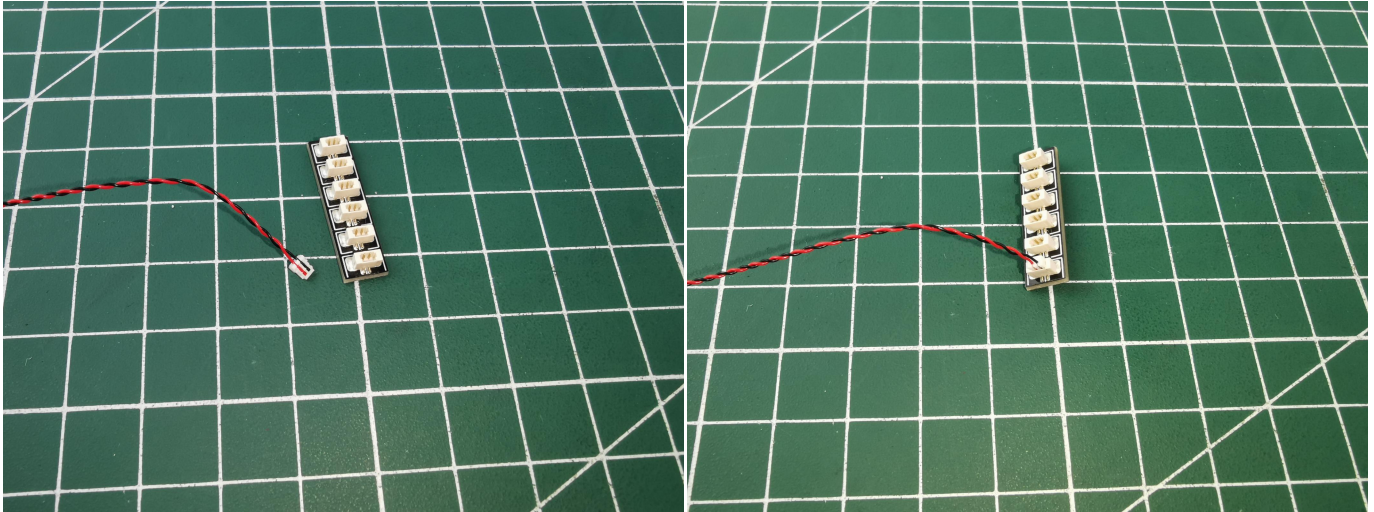
Note that on one side of the white plug you can see two very small golden wires that should be connected to the two golden needles in socket of the expansion board.shown as blow.





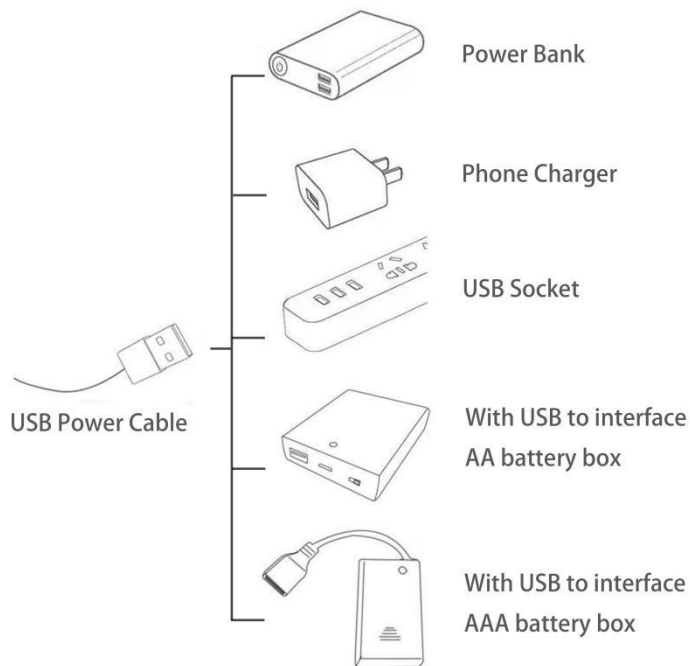
All our connections between plug and socket are all the same as shown above. So for any such structure with plug and socket, please pay attention to the golden wire of the plug and the golden needle of the socket, they must be touched together.

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



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

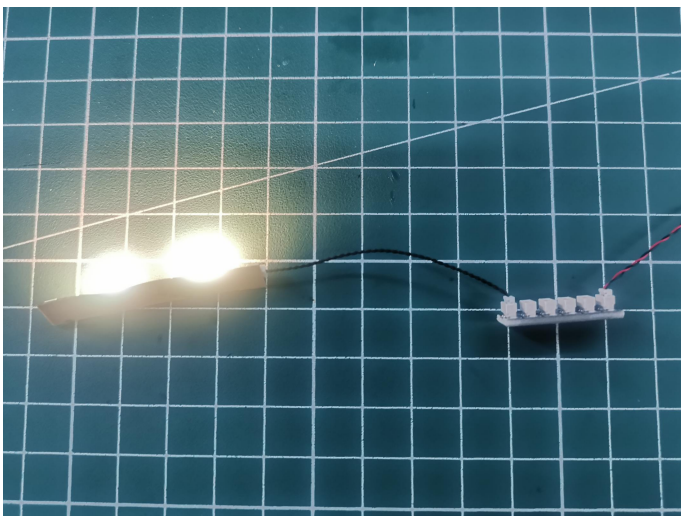
USB connectors to connect devices



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



**when we test "LED Strip Lights-Warm White" particles,Take out the bag labelled "LED Strip Lights-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\*LED Strip Lights-Warm White,2\*Flashing Bit Lights-15CM-Warm White,6\*Multi-Colour Light String.  
Please contact us immediately if any components don't.**



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

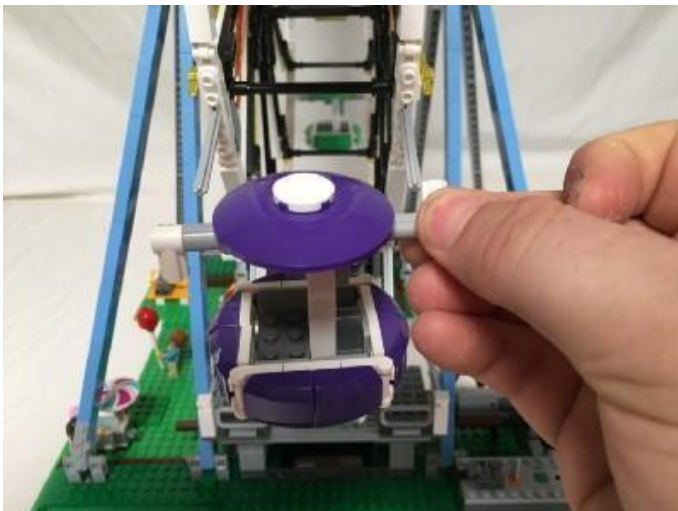
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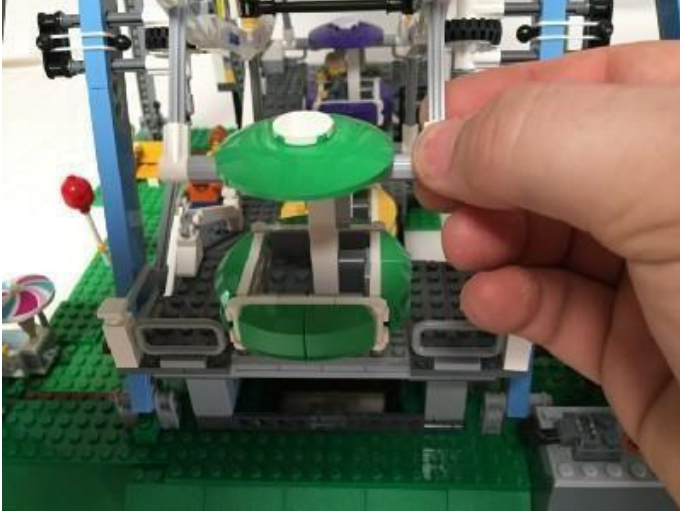


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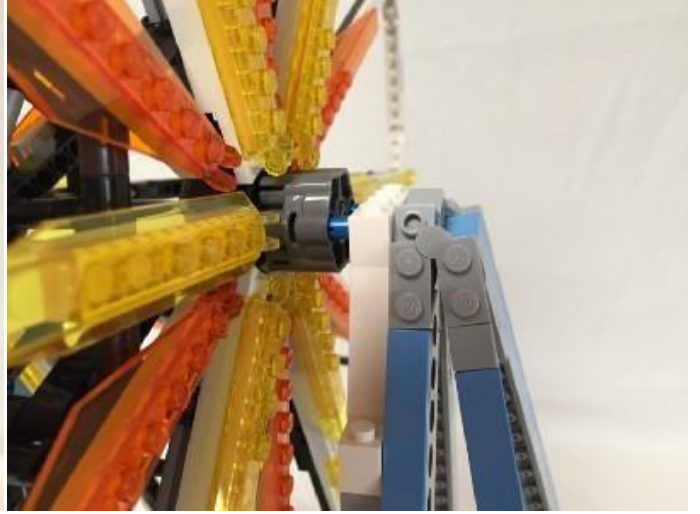
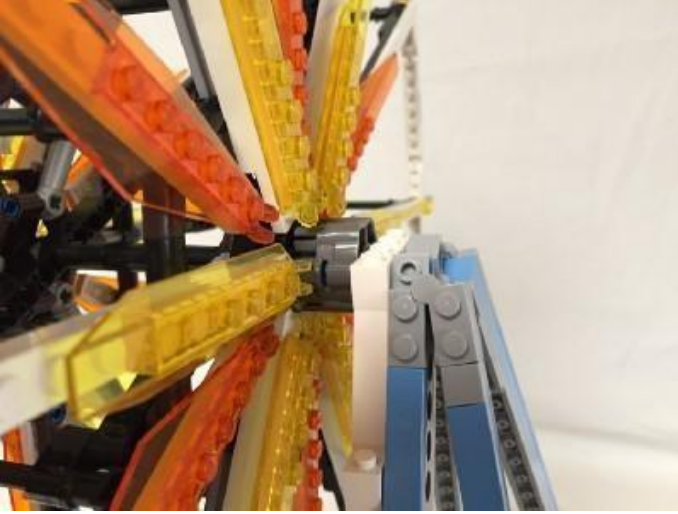
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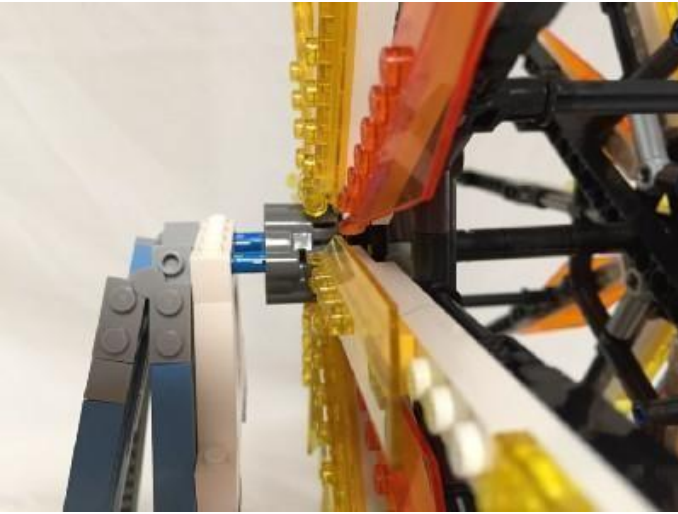
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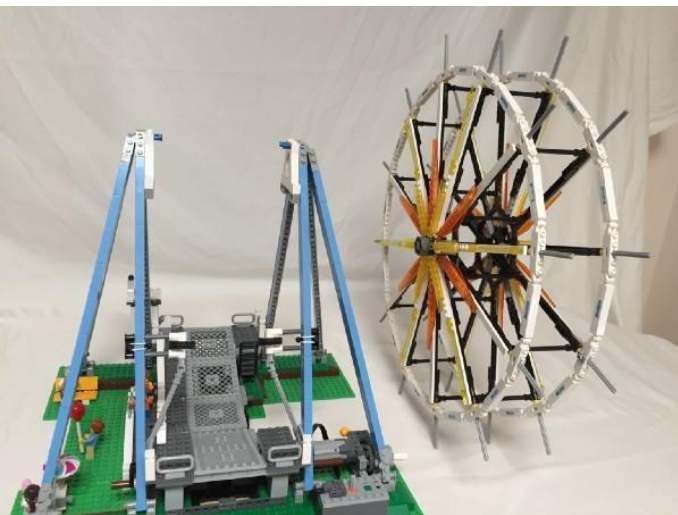
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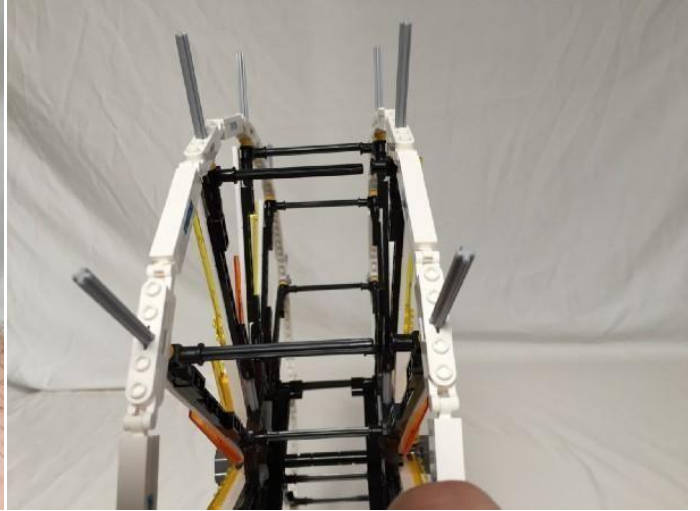
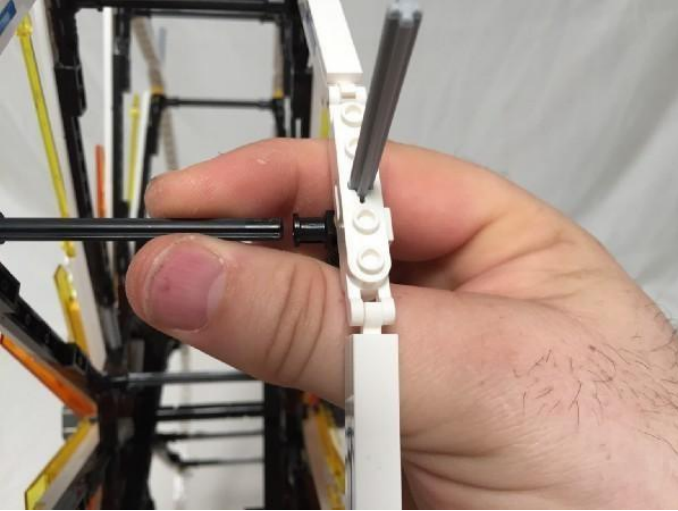


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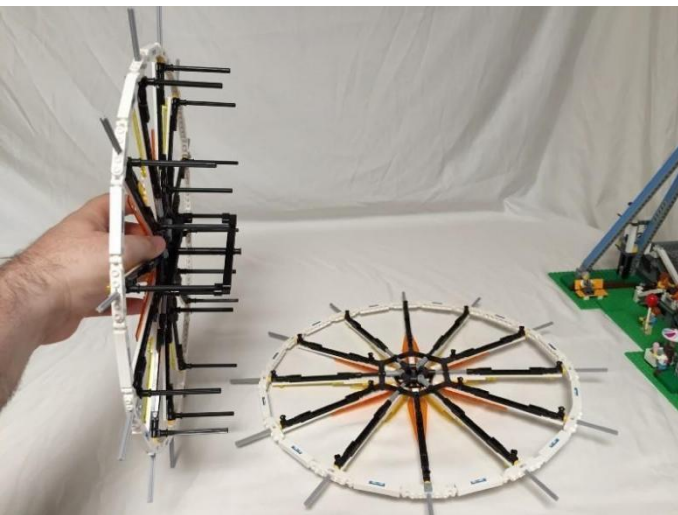
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11



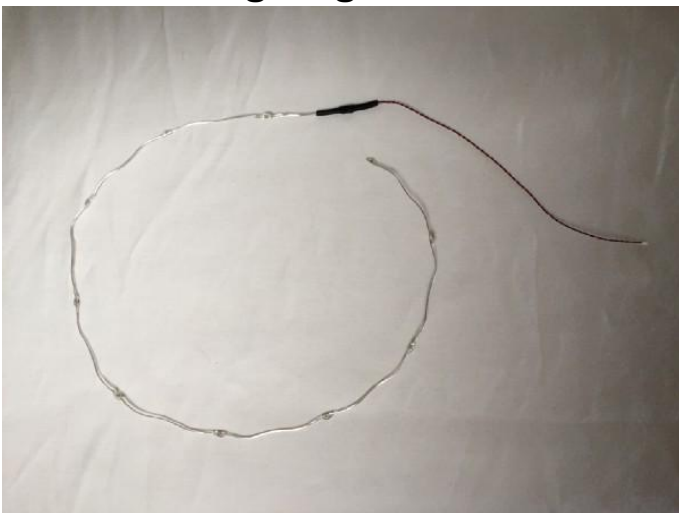
**12**



**13**



**14.** We are going to work with the right side of the wheel.

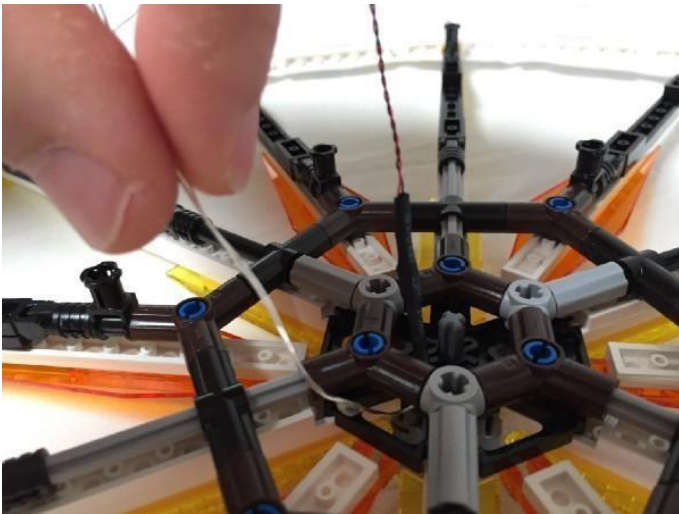




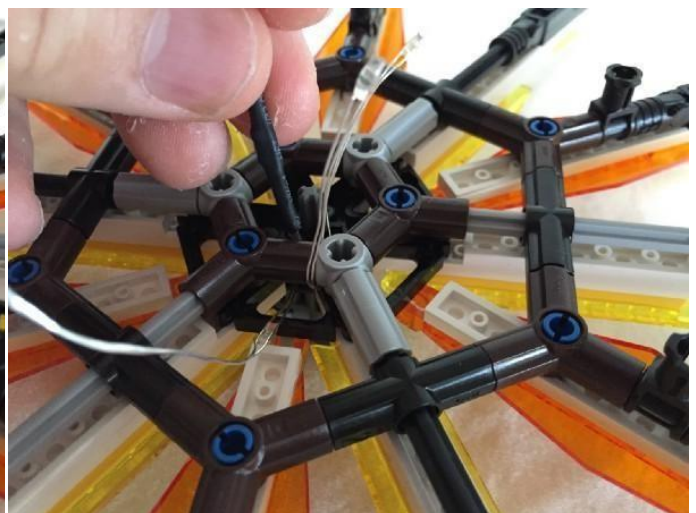
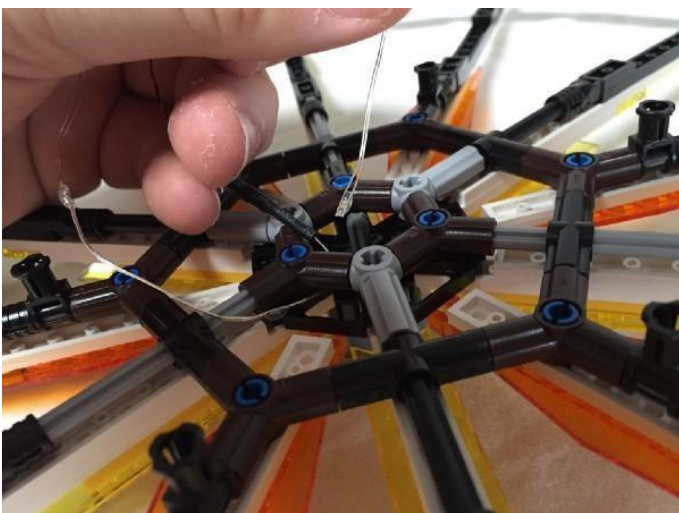
**15.** Grab one of the Colour Changing Light Strings and thread it through the inner most ring of axle connectors.



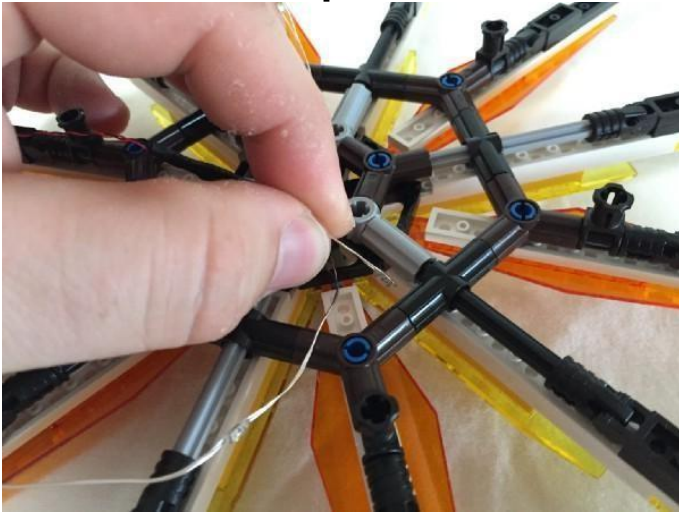
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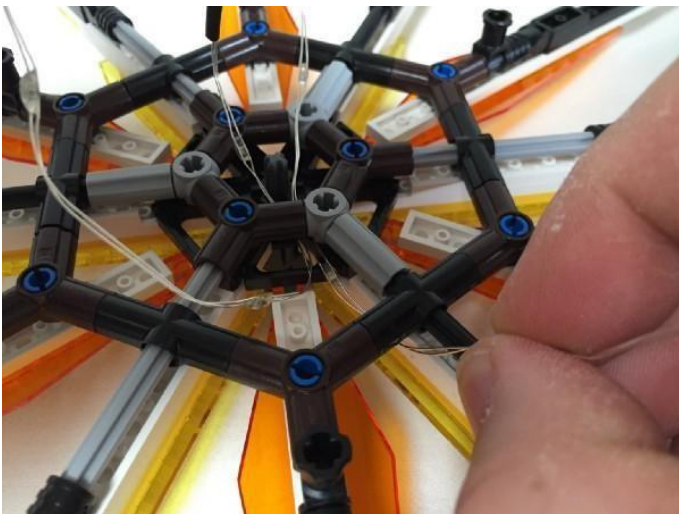
**17**



**18.** Grab the end of the Colour Changing Light String and feed it through the axle connectors again, wrapping it around the brown axle connector piece.



**19**

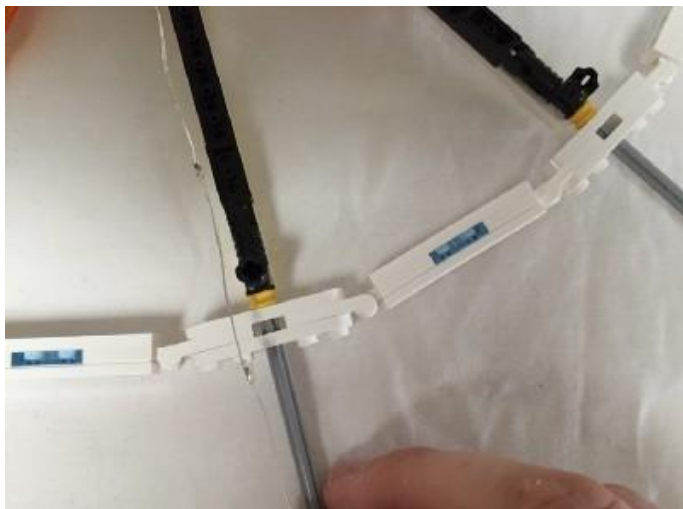


**20.** Feed the end of the Colour Changing Light String underneath the outer ring of axle connectors.

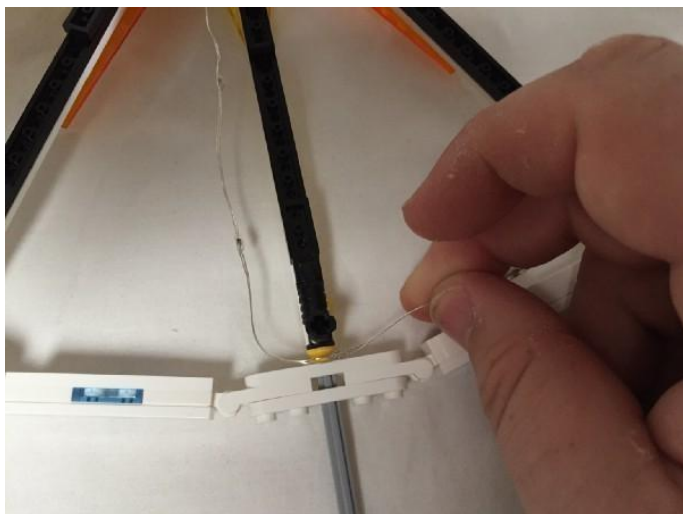




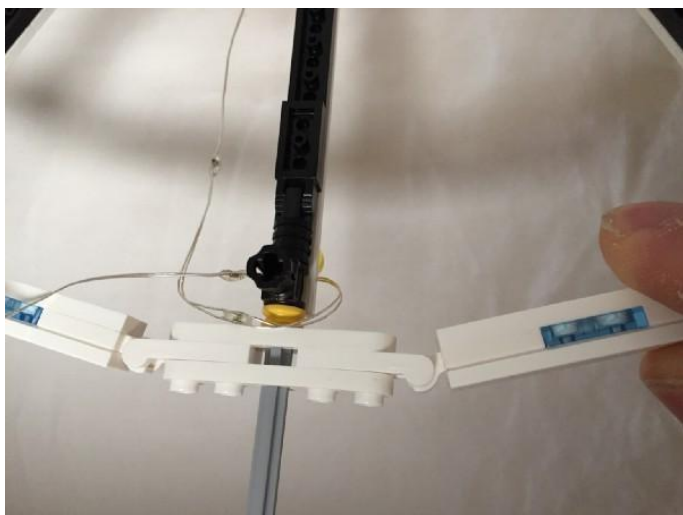
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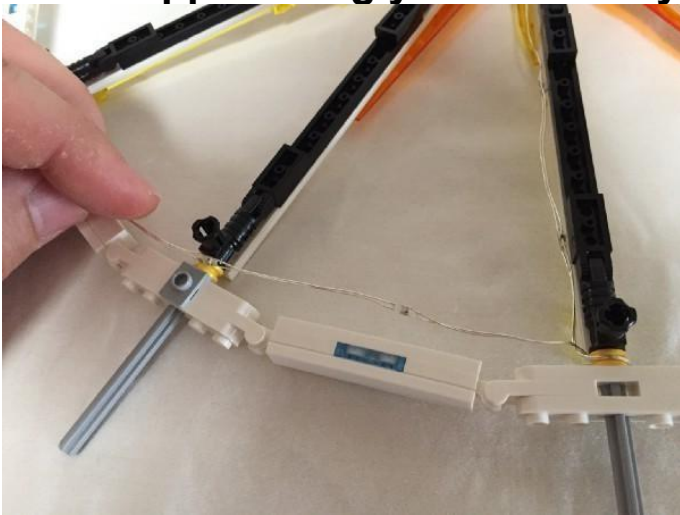
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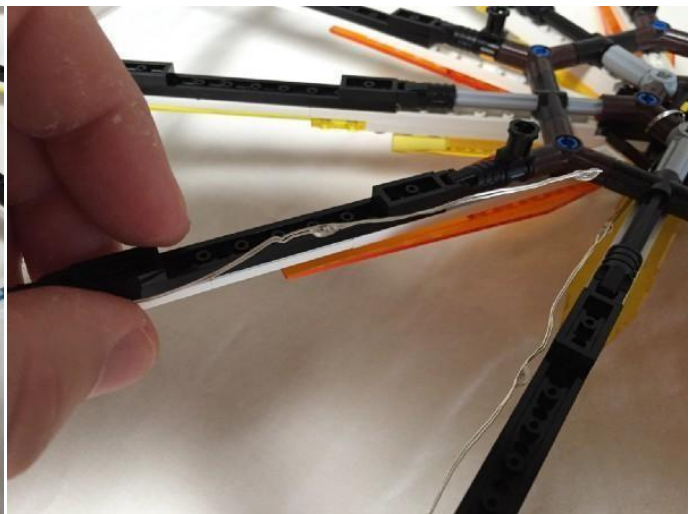
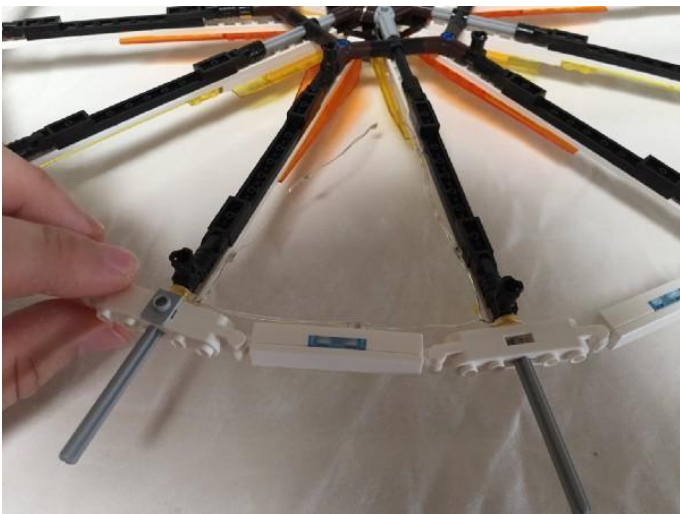
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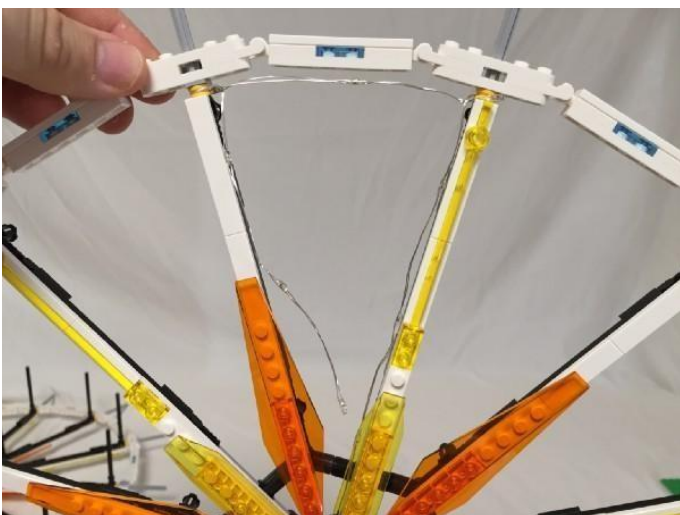
**24.** Carefully pull the Colour Changing Light String to your left until it is wrapped snugly around the yellow technic bush piece.



**25**



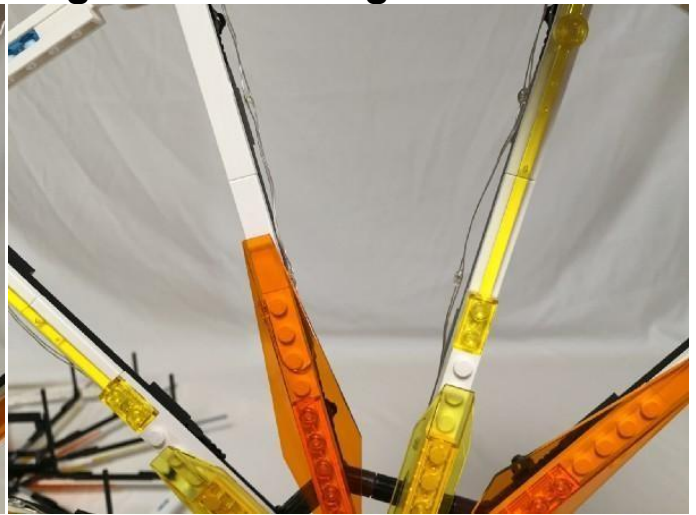
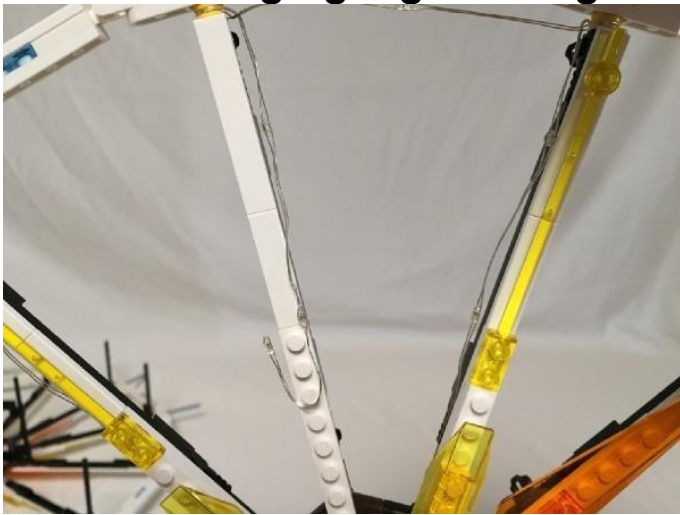
**26**





**27.**Stand the wheel up so that you can access the side with the transparent yellow and orange pieces.

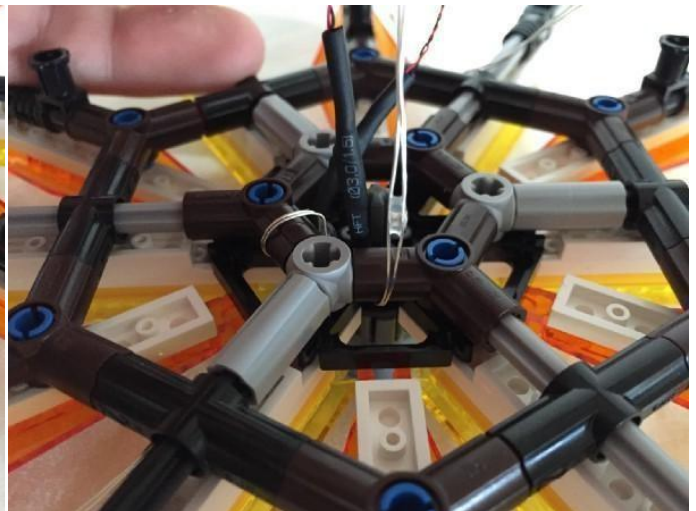
Remove the transparent orange piece on the spoke that has the Colour Changing Light String running down the length of it.



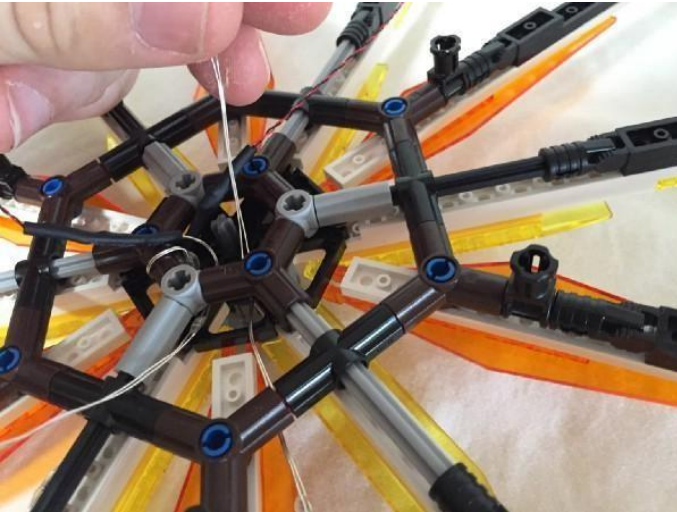
**28**



**29.**Place the wheel kat on the table again and rotate it clockwise until the next available technic connector piece on the inner ring of technic connectors is facing you.



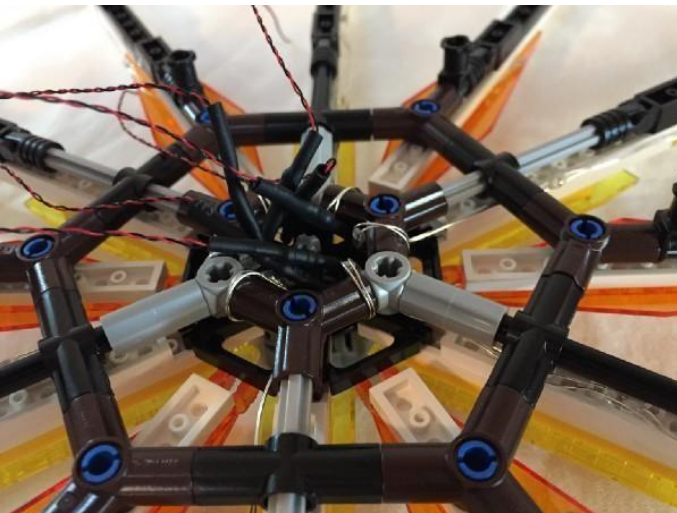
**30**



**31**



**32.**Remember to feed the Colour Changing Light String out down the length of a spoke that has transparent yellow pieces on the other side of it.

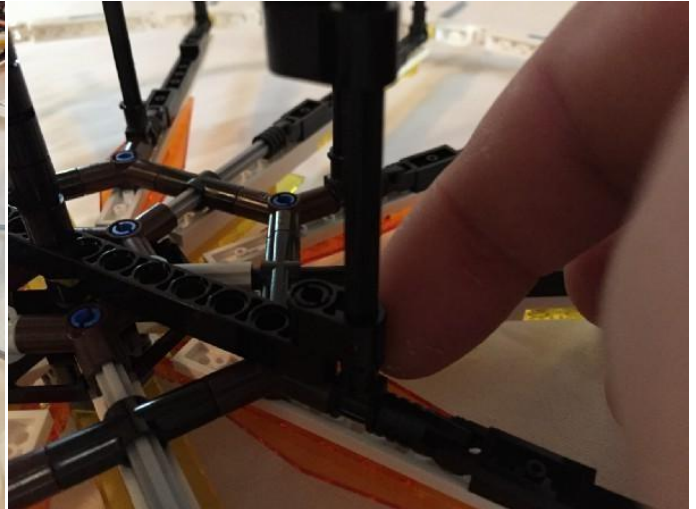




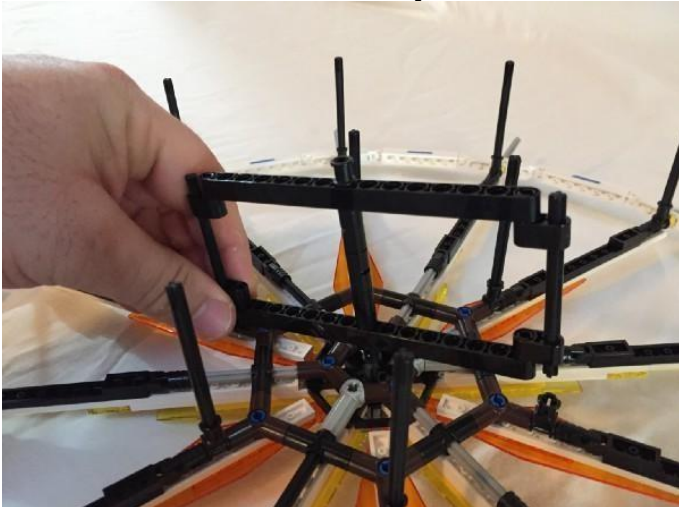
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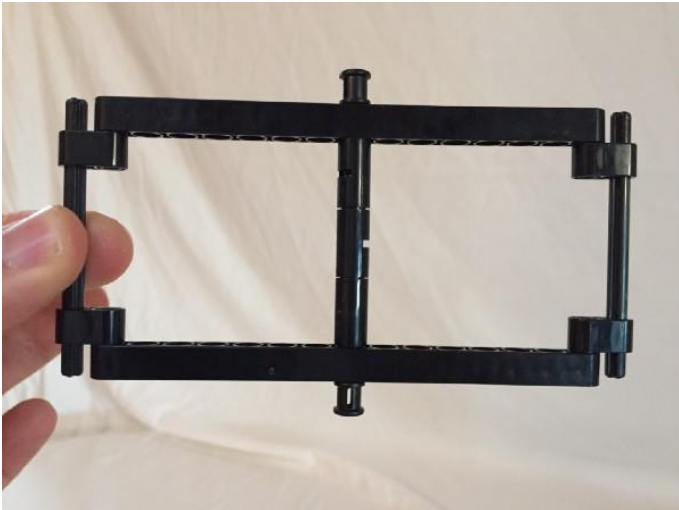
**34.**When you have finished all six sections, the Ferris Wheel ring will look something like the pictures above. Put this half of the wheel aside for now.



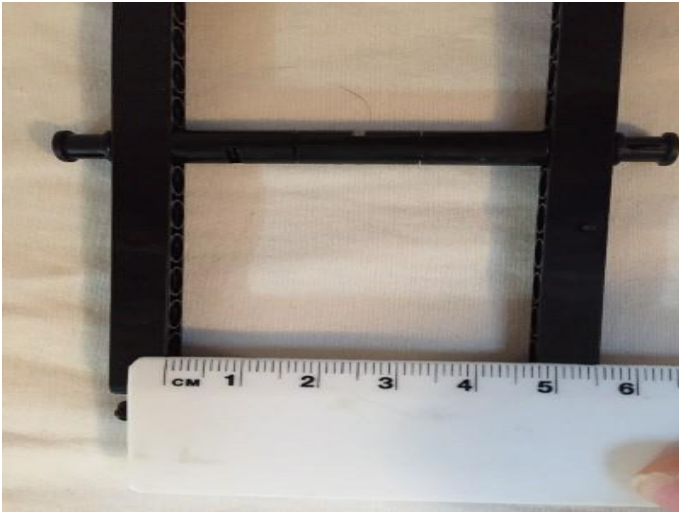
**35.**Grab the other half of the wheel with all the technic axle pieces still attached. Lift the technic axle pieces at either end of the centre section.



**36**



**37.**Keep lifting until the centre section is detached from the wheel.



**38**





**39**



**40.** Grab AA Battery Pack or your USB power bank and rubber bands.

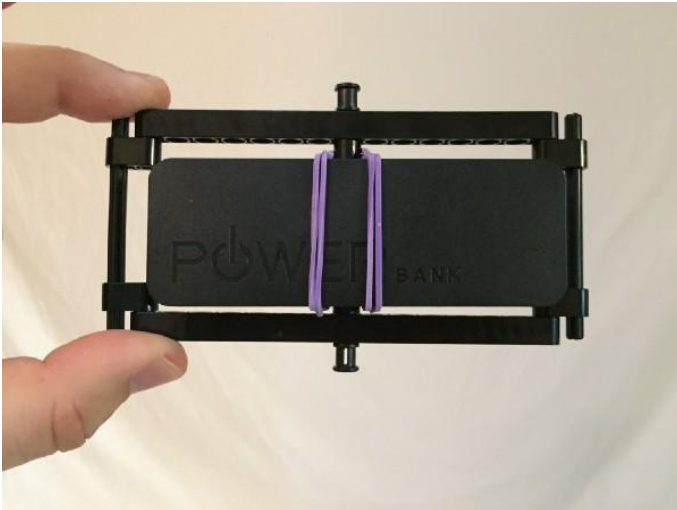


**41.** Put the rubber bands around AA Battery Pack or the USB power bank and move them approximately one third of the way down the power bank.

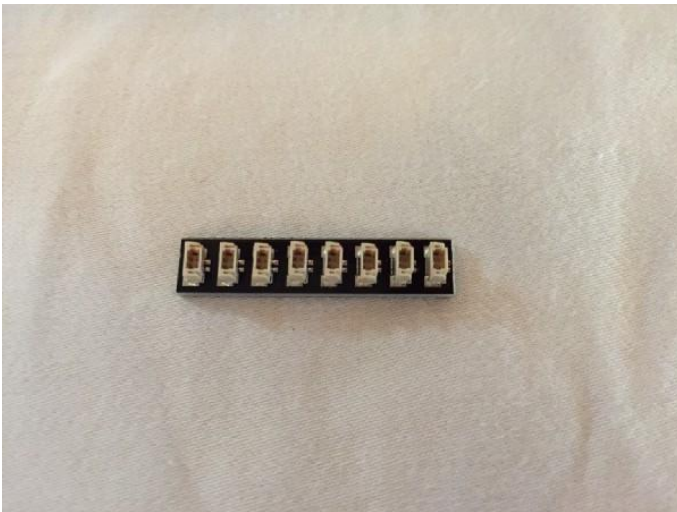
Sit AA Battery Pack or the power bank on top of the centre section.



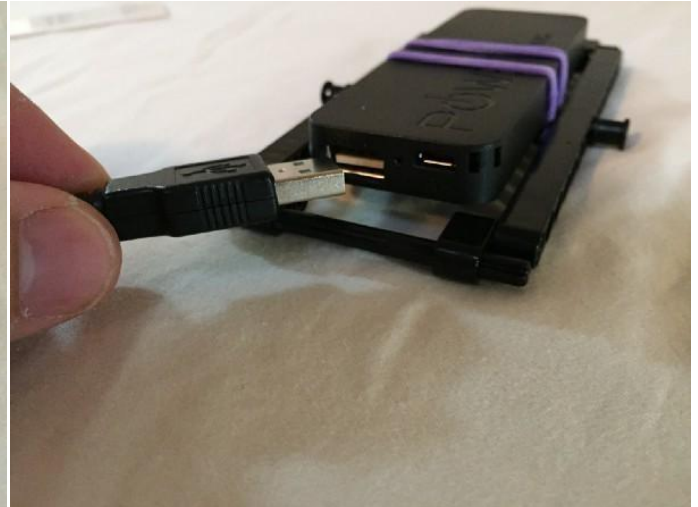
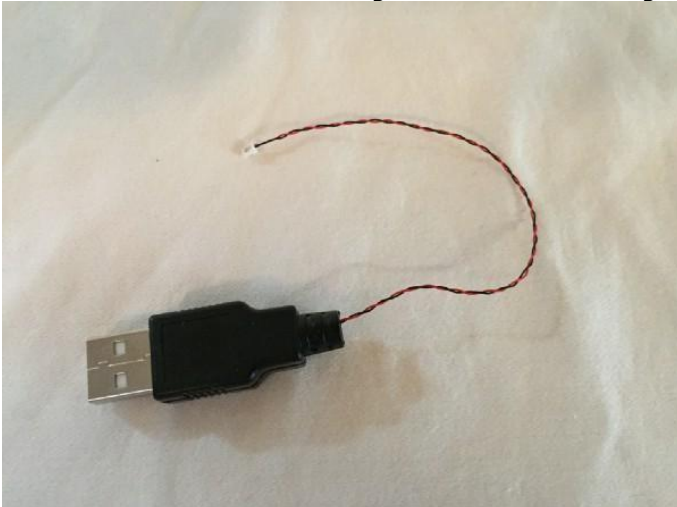
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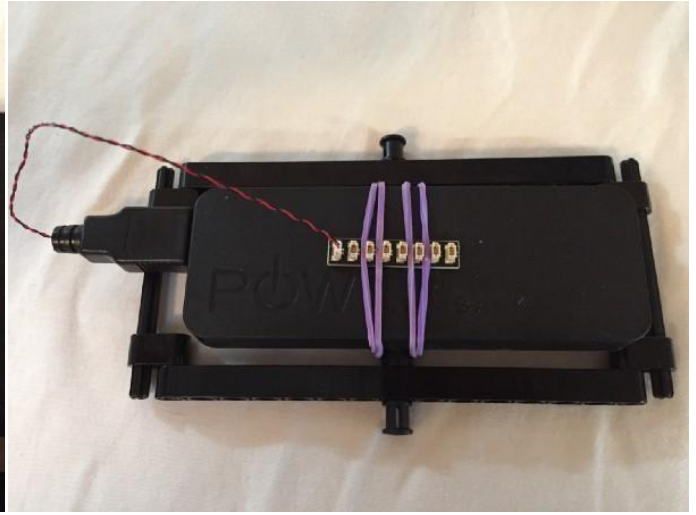
**43.** AA Battery Pack or the power bank should comfortably rest on the centre section.



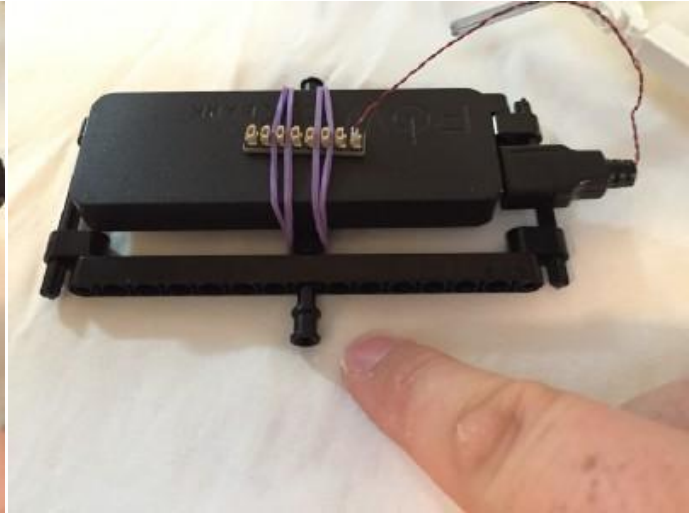
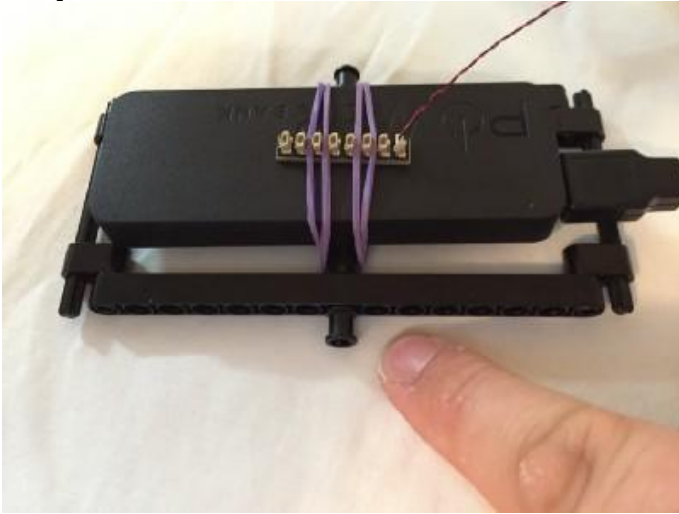
**44.** Grab the 8 port Expansion Board and secure it to the power bank underneath the rubber bands. If there is no mobile power, connect the battery case directly to the socket.



**45.** Grab AA Battery Pack or the USB Power Adaptor and connect it to AA Battery Pack or the power bank.



**46.** Plug AA Battery Pack or the USB Power Adaptor in to the 8 port Expansion Board.

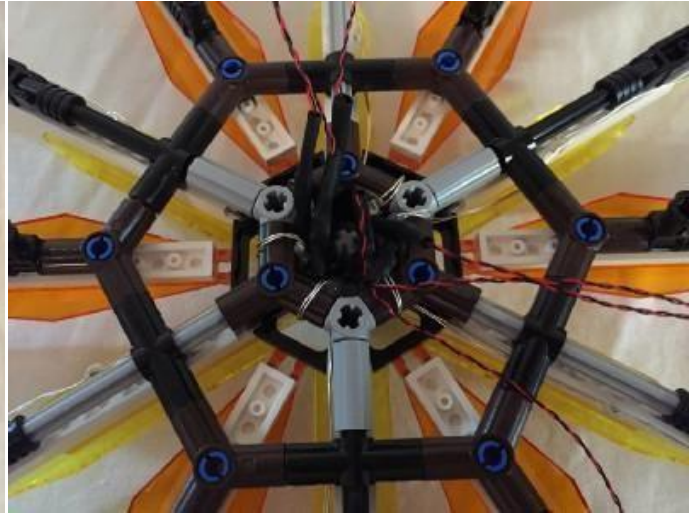


**47**

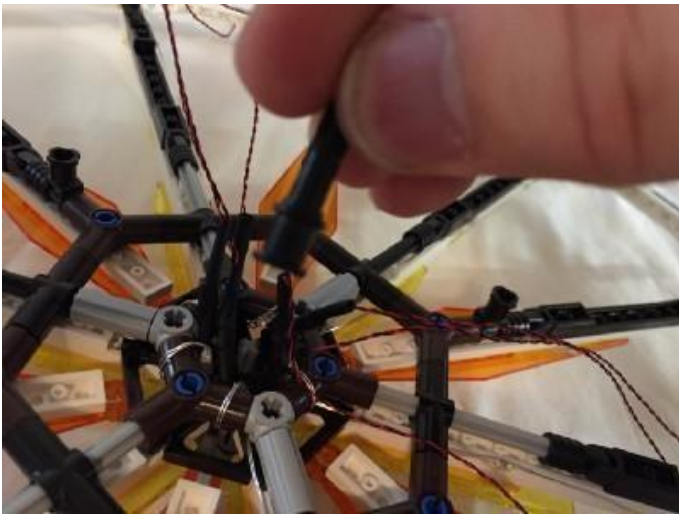




**48.** Remove the black technic pin from one side of the centre section.

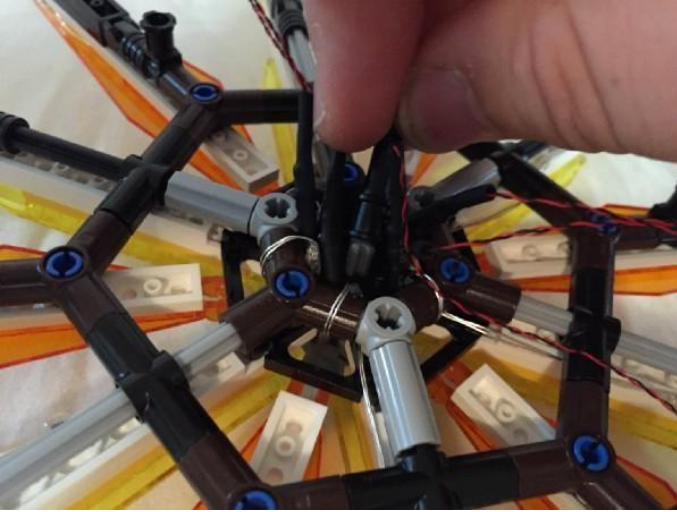


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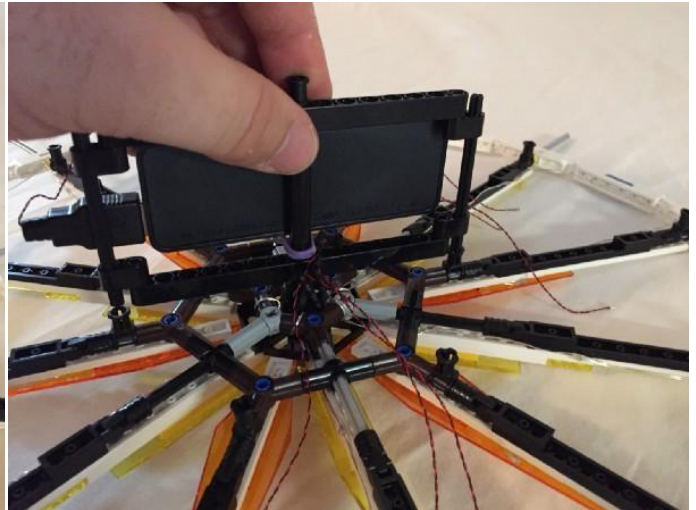
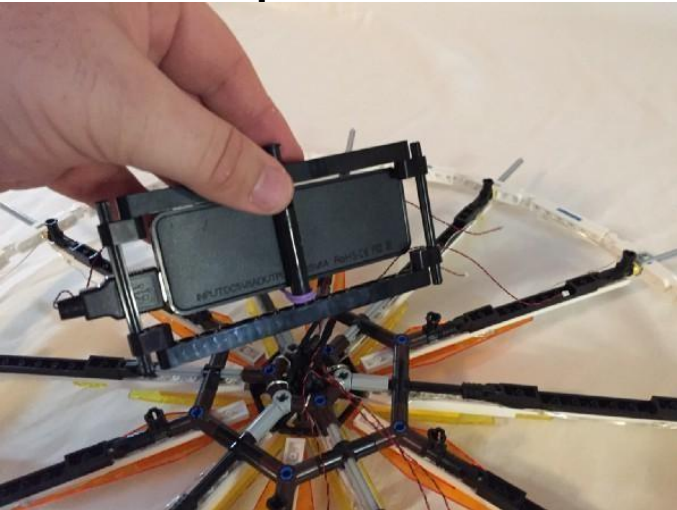




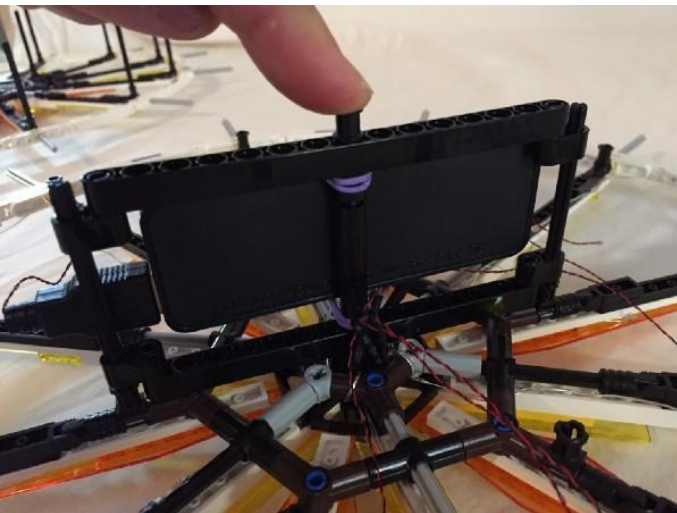
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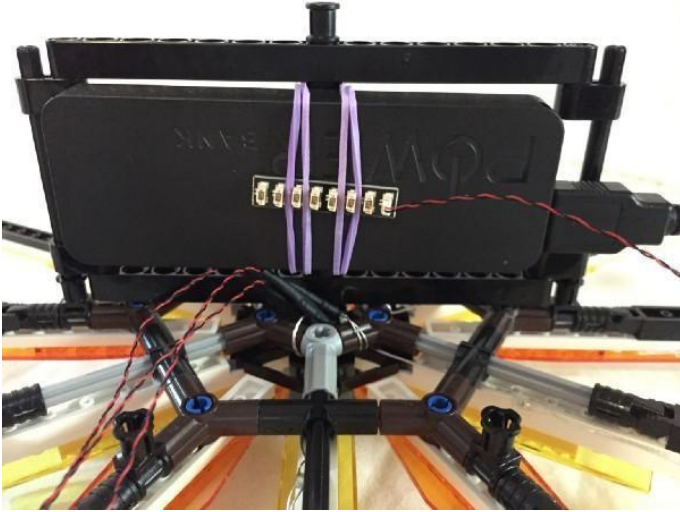
**51.** Attach the black technic pin from the centre section to the grey technic axle piece.



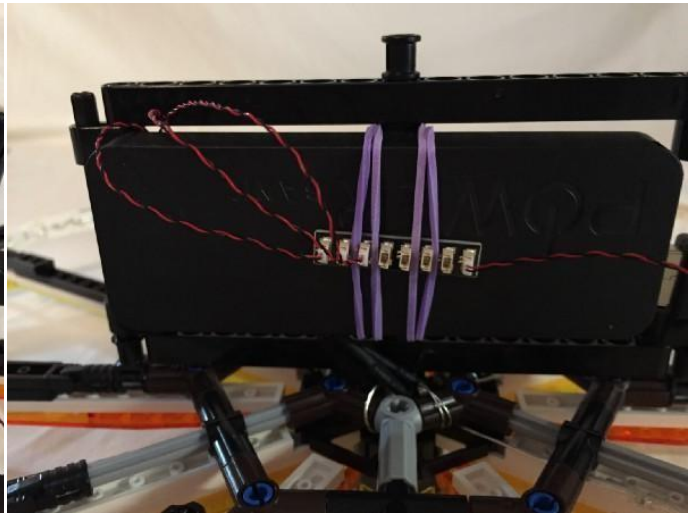
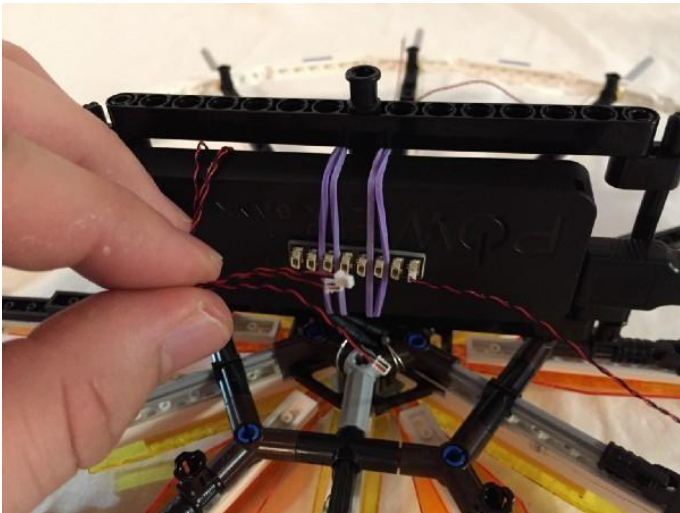
**52.** Reattach the centre section to the black technic pin.



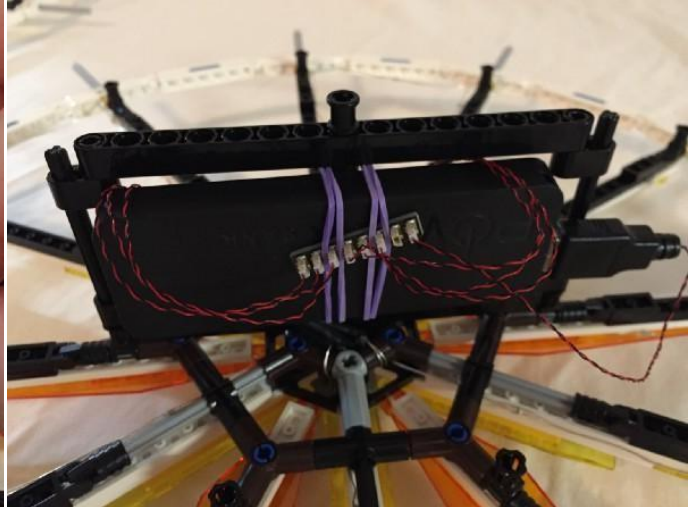
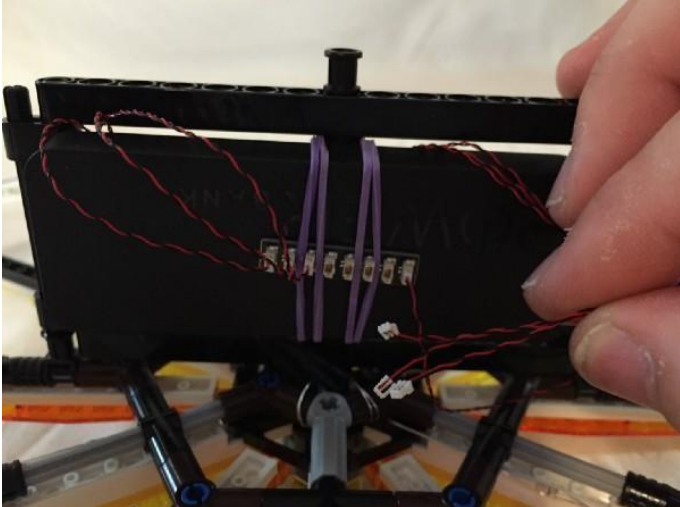
**53**



**54.**Secure the centre section by reattaching the black technic axle pieces at either end of the centre piece, to the axle connectors on the wheel.

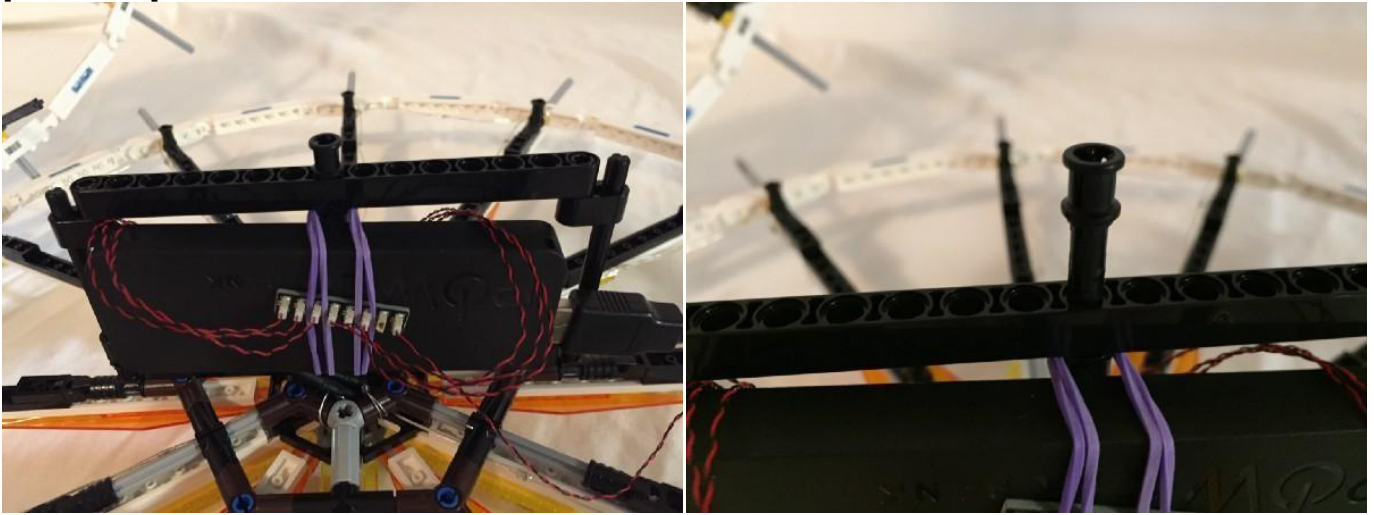


**55.**Wrap the wires from the Colour Changing Light Strings around the power bank to take up some of the slack if you wish.

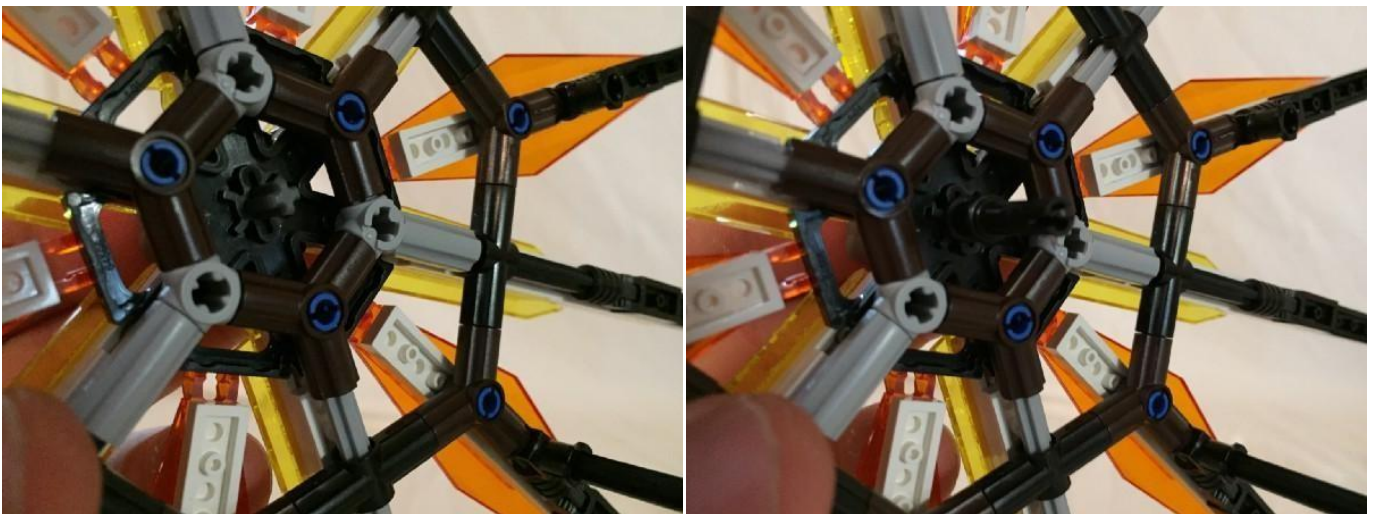




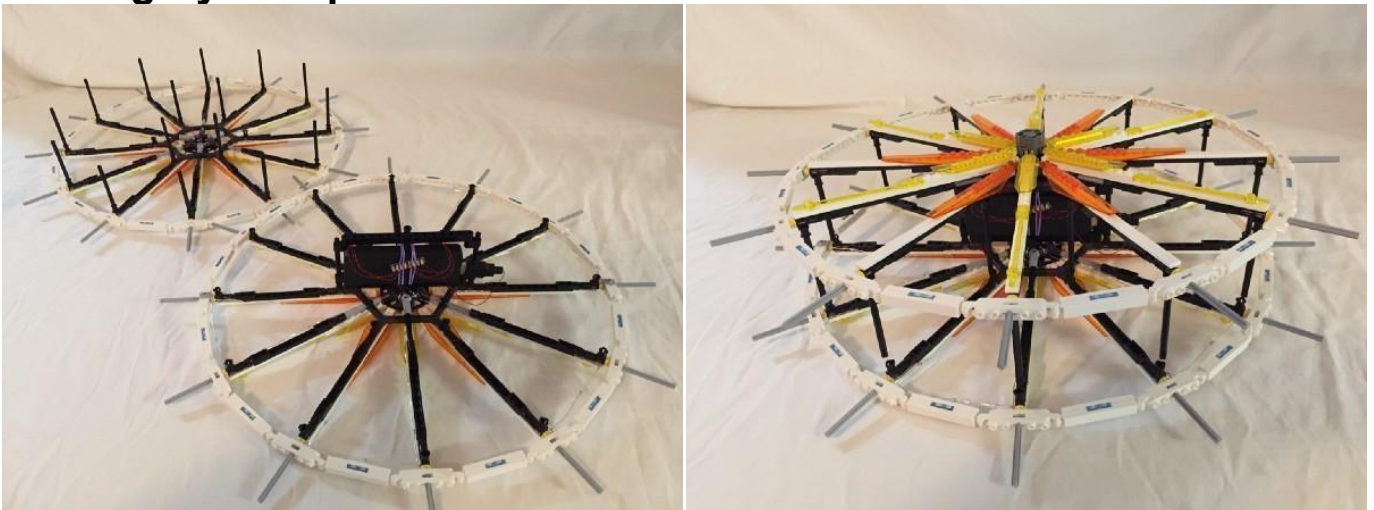
**56.** Attach the plugs from the Colour Changing Light Strings to the 8 port Expansion Board.



**57.** Remove the black technic pin from the exposed side of the centre section.

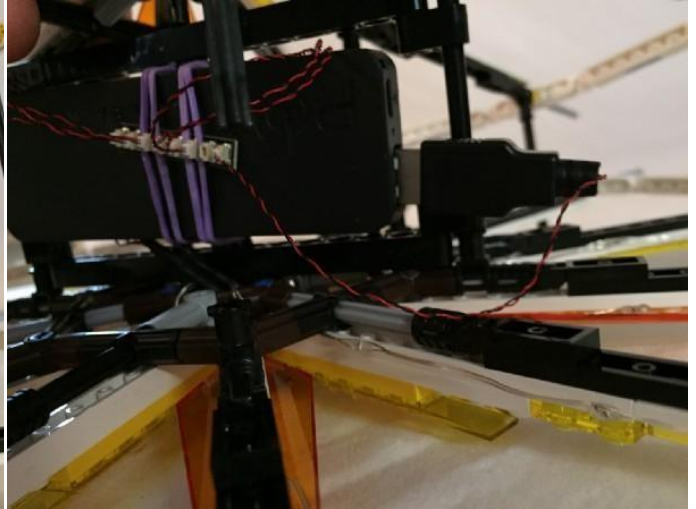
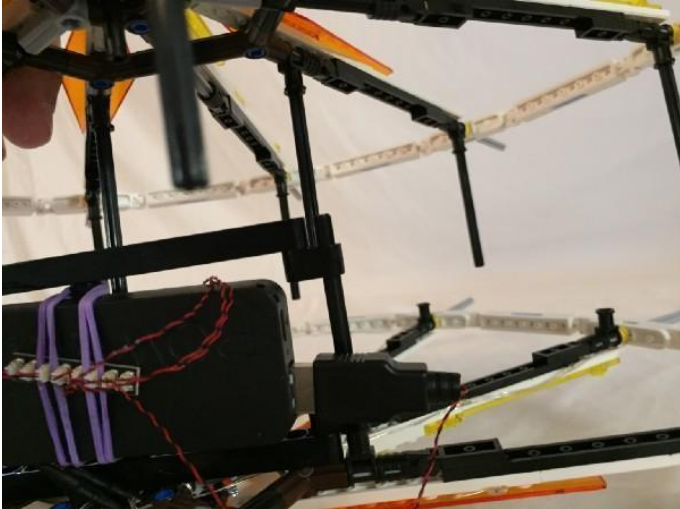


**58.** Grab the other half of the wheel and attach the black technic pin to the grey axle piece in the centre of the wheel.

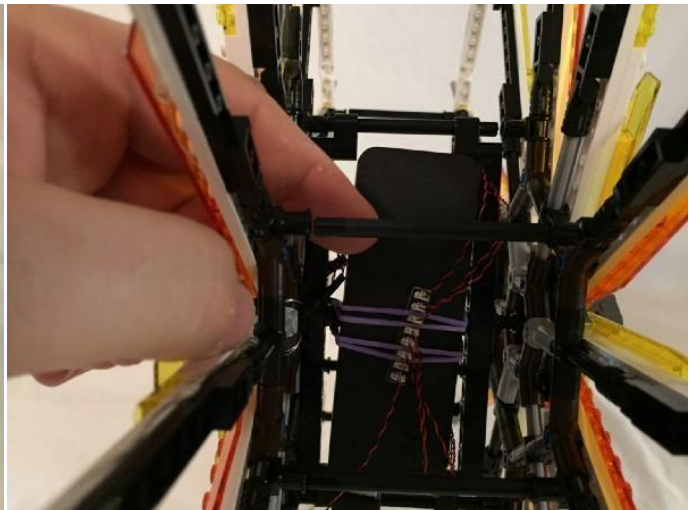
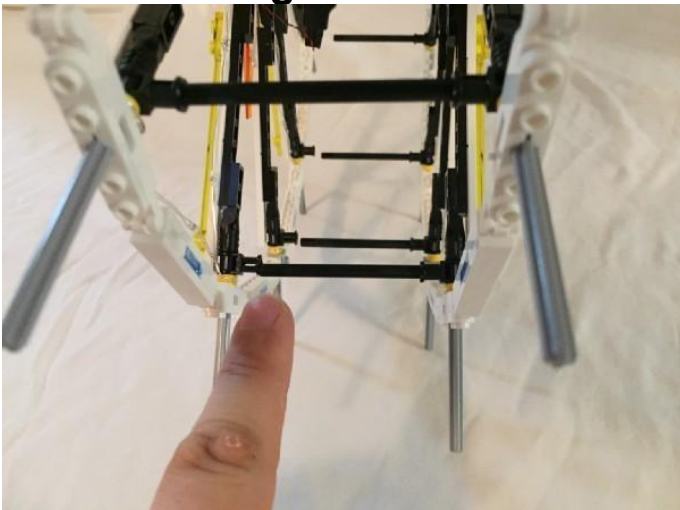




**59.**Put the wheels back together and prepare to reattach them.



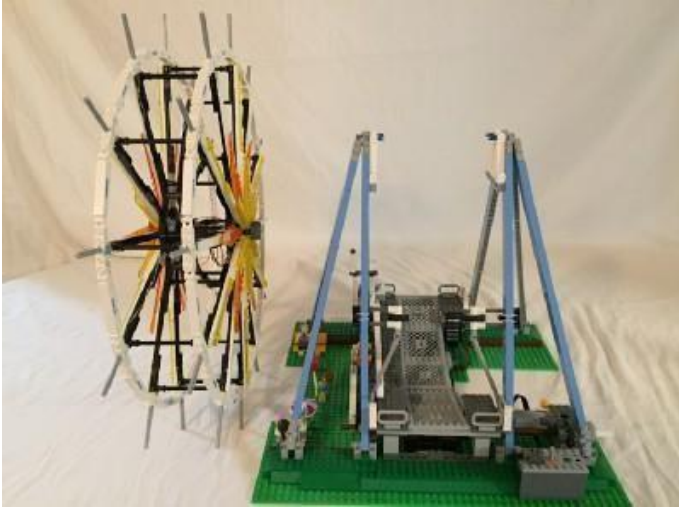
**60.**Do your best to line up axle pieces with axle connectors. Focus on reattaching the centre section section first.



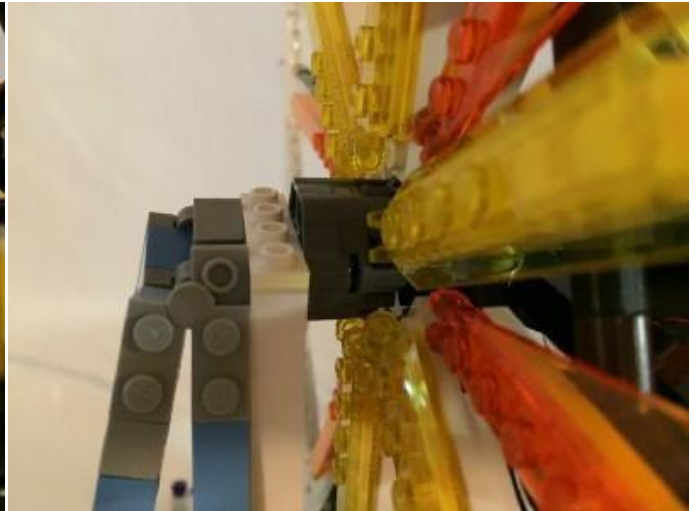
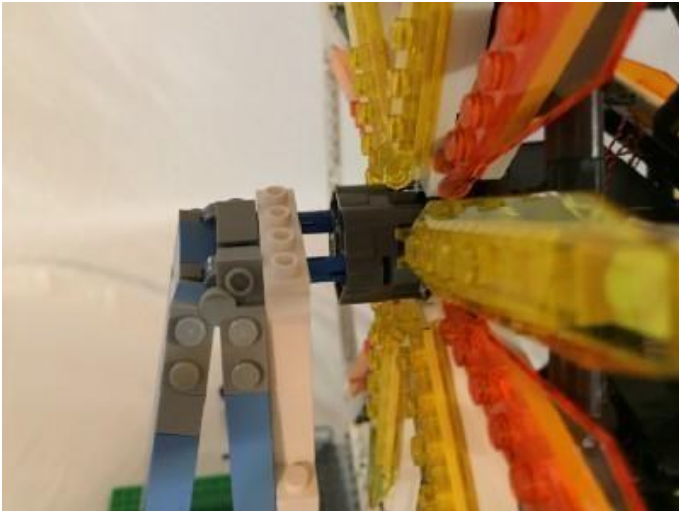
**61.**Work around the wheel reattaching all the axle pieces and axle connectors.



**62**



**63.** Once your wheel is back together, grab the base of the model and prepare to reattach the wheel to the support structure. Make sure the Colour Changing Light Strings are facing the front of the model.

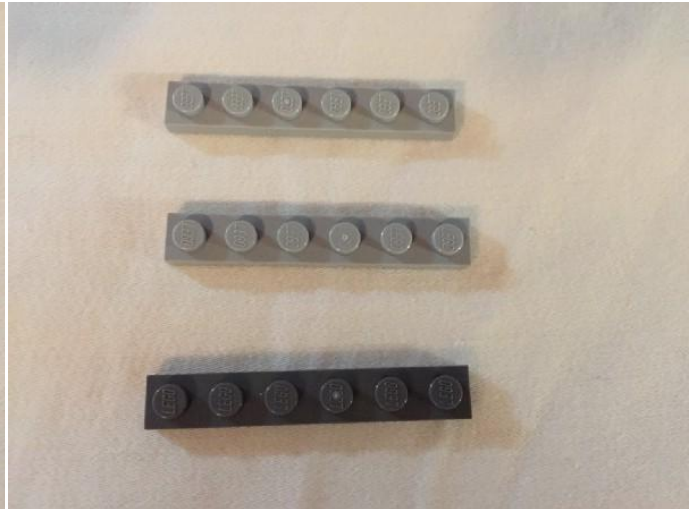
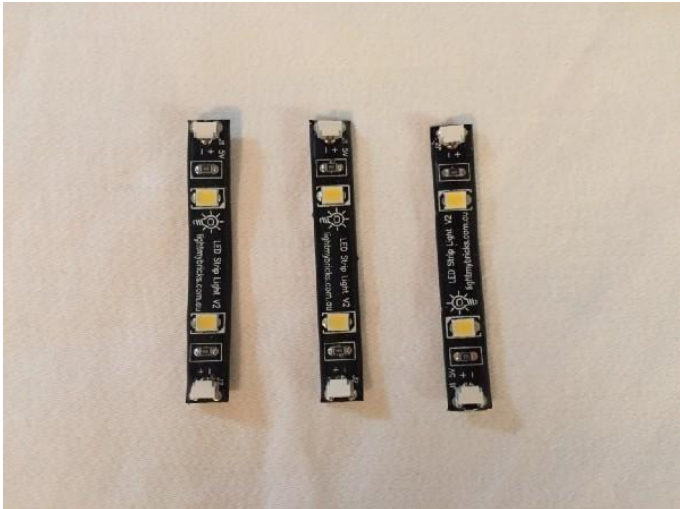


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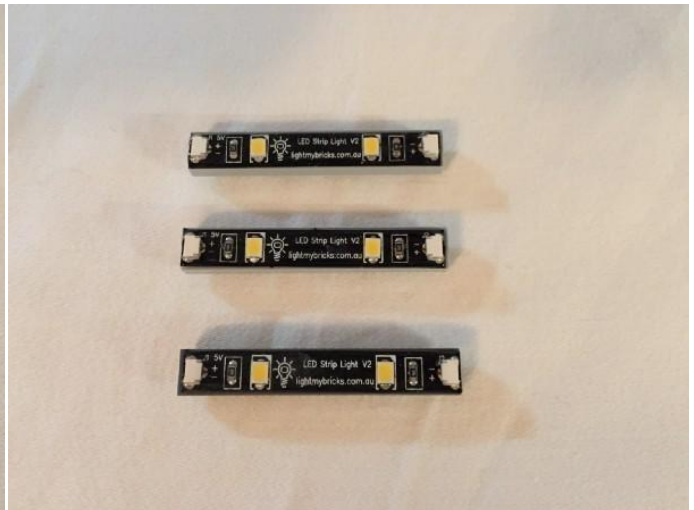




**65.**Lift the wheel in and reattach the technic pins to hold it in place.

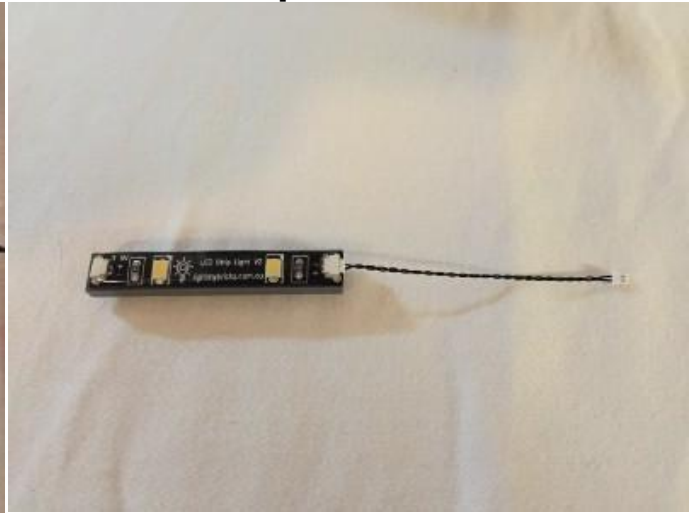
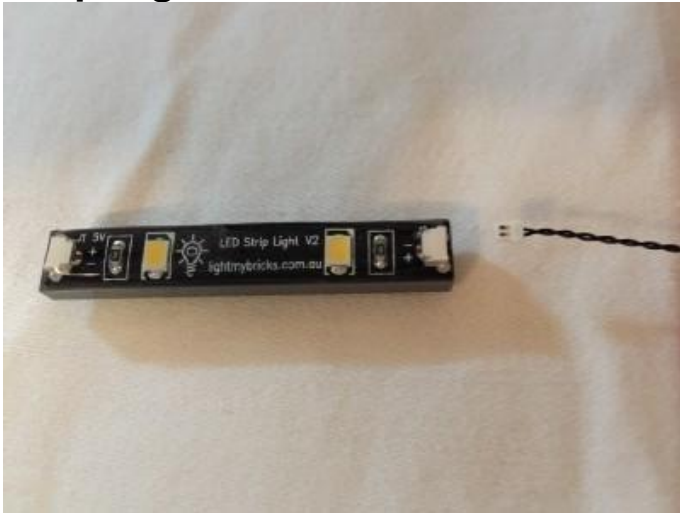


**66.**Time to grab the three Strip Lights and the 1 x 6 plates if you chose to use them.

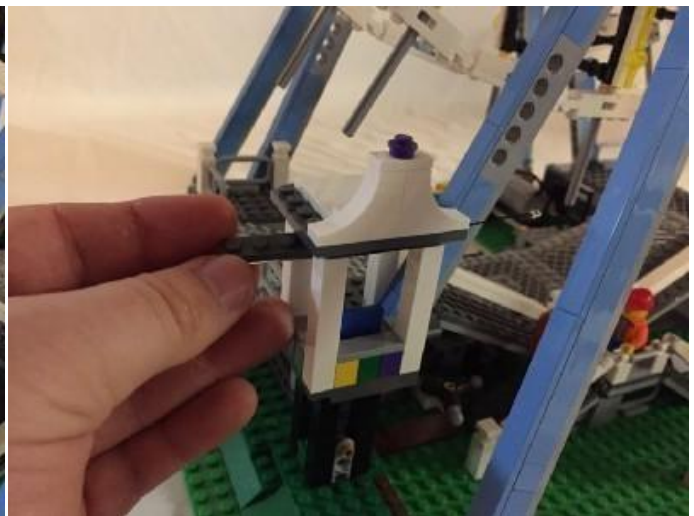
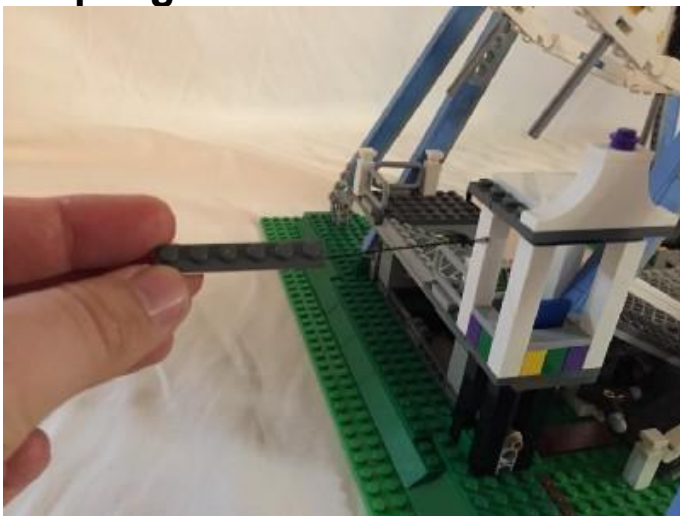




**67.** If you have the 1 x 6 plates, peel the adhesive backing off the Strip Lights and attach them to the back of the plates.



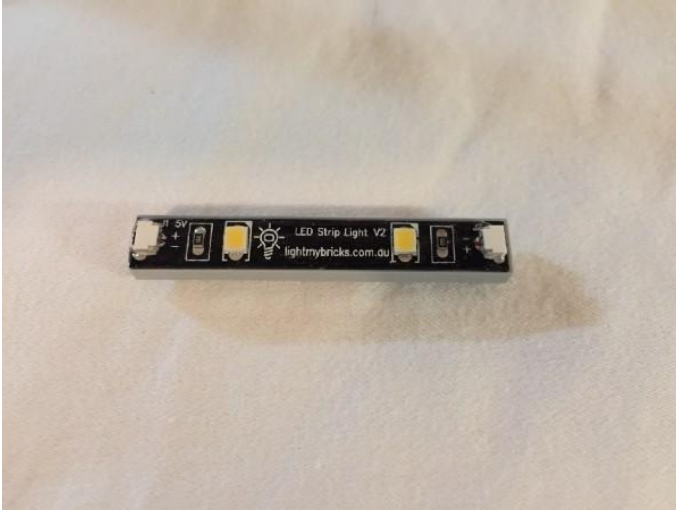
**68.** Grab the 5cm Connecting Cable and connect it to one of the Strip Lights.



**69**



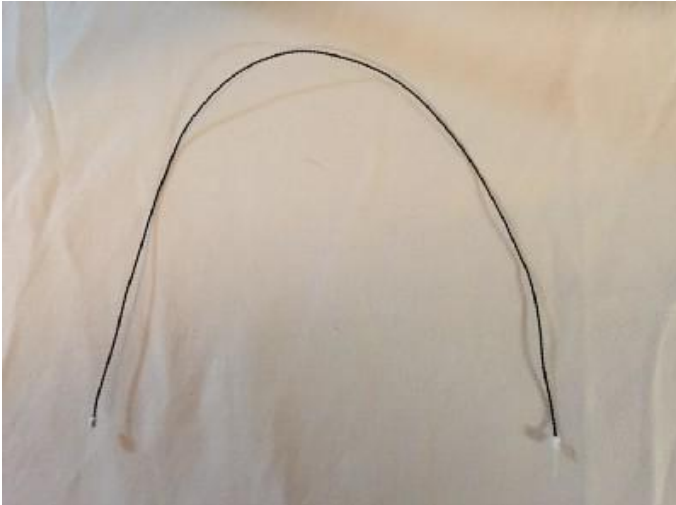
**70.** Working from the outside and then in, feed the 5cm Connecting Cable end of the Strip Light through the control booth and attach the Strip Light to the roof.



**71.** Grab another Strip Light and connect it to the other end of the 5cm Connecting Cable.



**72.** Attach the Strip Light to the nearest support structure leg.

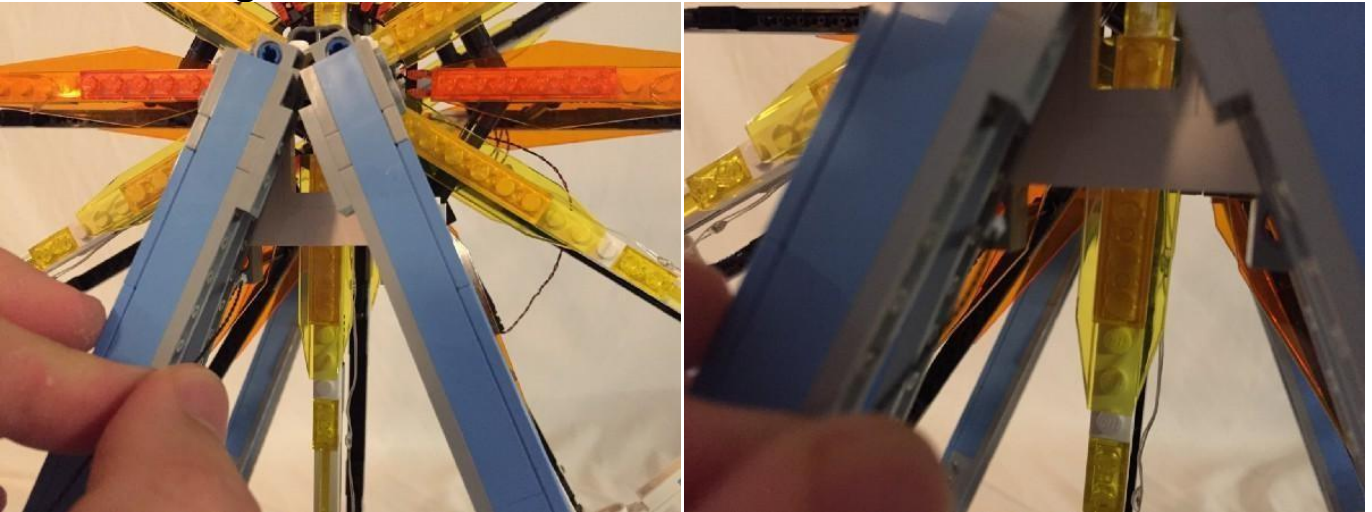




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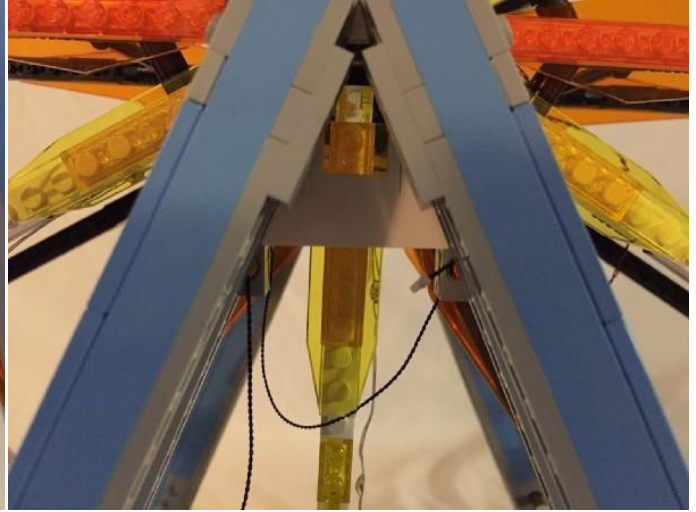
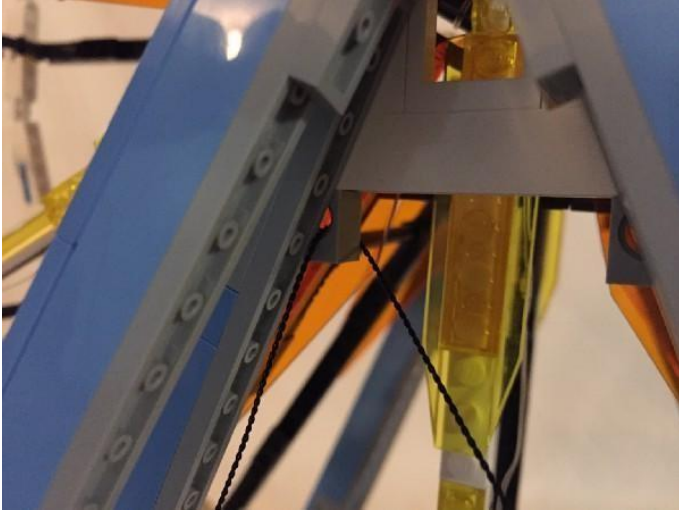


**74.** Grab the 30cm Connecting Cable and connect it to the other end of the Strip Light that was just attached to the support structure leg.





**75.**Towards the top of the support structure legs, you will see a partial technic hole that we will feed the 30cm Connecting Cable through. You will have to push that piece back a fraction so that you can feed the plug of the cablethrough.



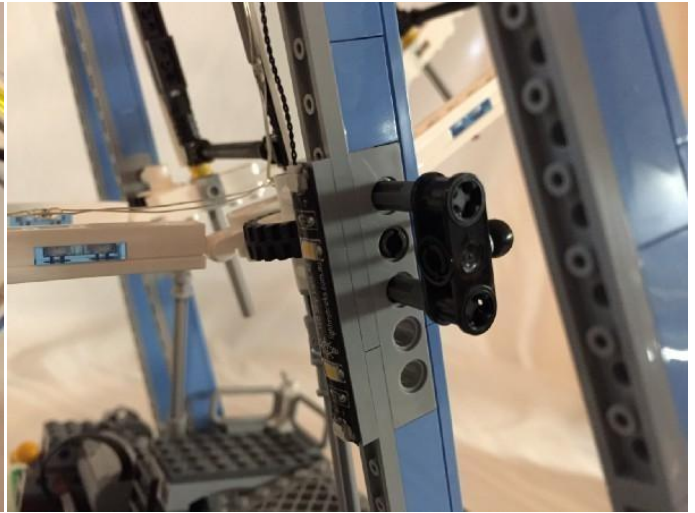
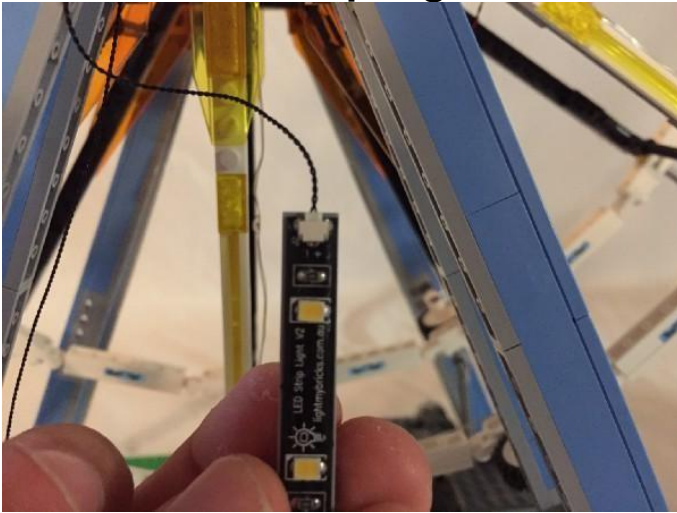
**76.**Pull the 30cm Connecting Cable through and then feed it back through the partially available technic hole on the other side.



**77**



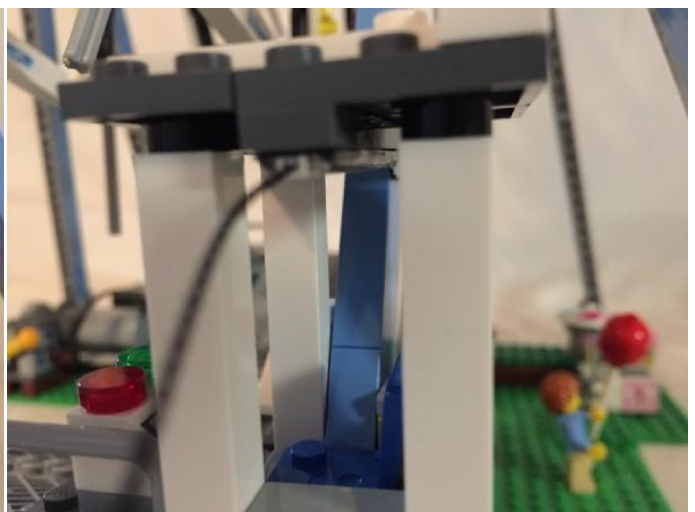
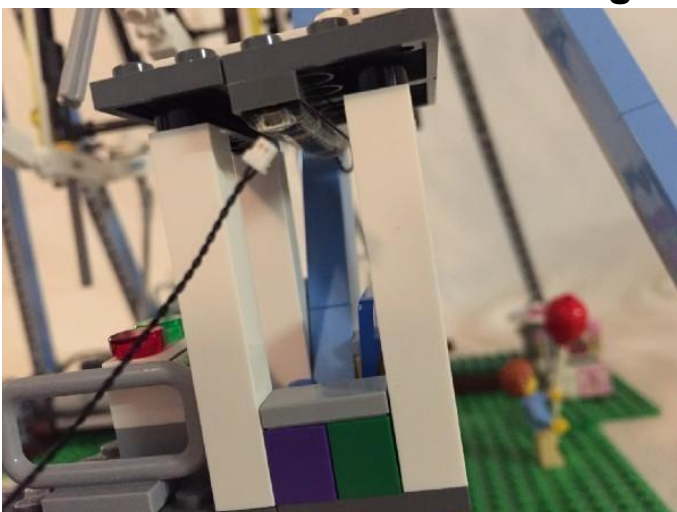
**78.** Pull the 30cm Connecting Cable through and let it hang down. Grab the last Strip Light.



**79.** Attach the 30cm Connecting Cable to the Strip Light and attach the Strip Light to the rear right support structure leg.

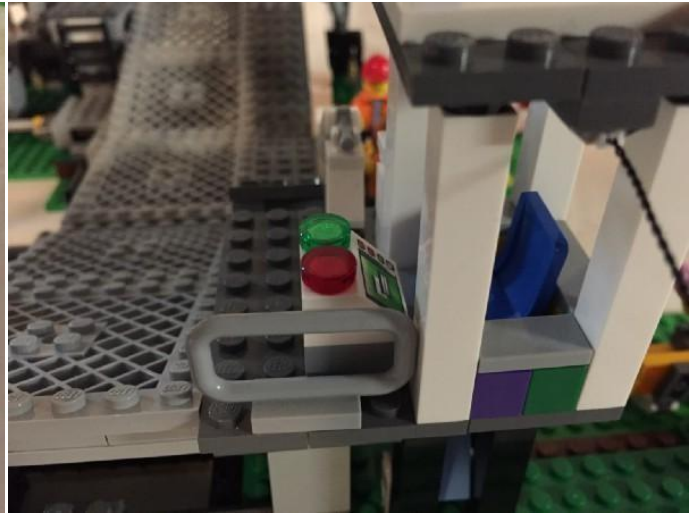


**80.** Grab the 15cm Connecting Cable.





**81.**Connect the 15cm Connecting Cable to the Strip Light attached to the roof of the control booth.



**82.**Grab the red and green transparent round 1 x 1 plates. Remove the red and green transparent round 1 x 1 tiles from the top of the control booth computer.



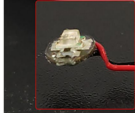


## Tips

The plate without slit:

### The plate without slit:

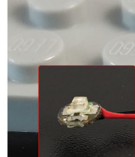
The squeeze causes the protective layer of the wire to be torn apart, the positive and negative wires touch together, and the set is short-circuited and the hot wire is crushed, the wire to be disconnected and don't work.



The plate with slit:

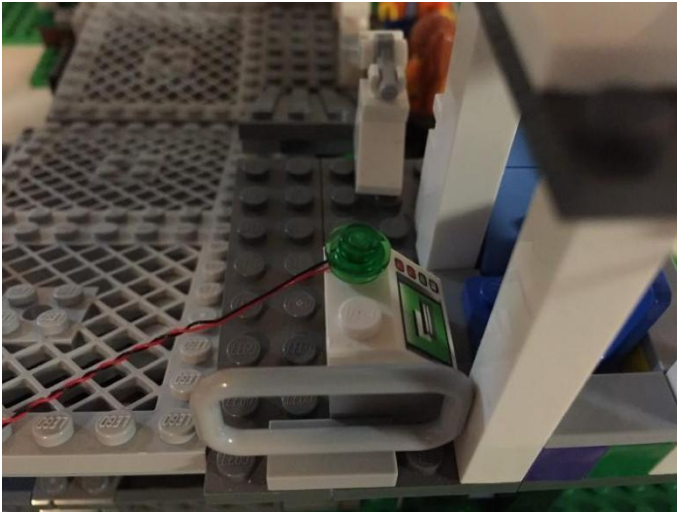
### The plate with slit:

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

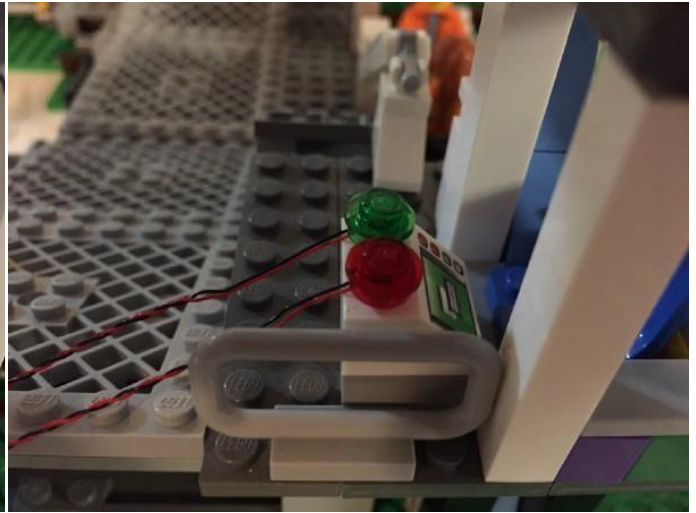
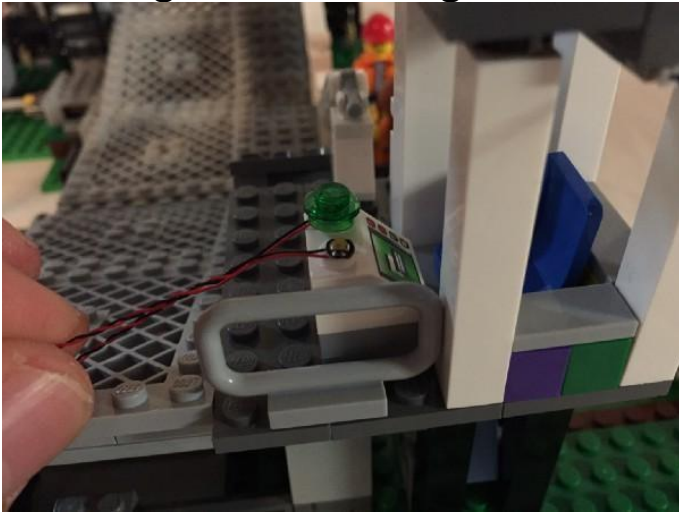


The slit on the the plate round 1X1 are hand-made to avoid squeeze the wire and cause short circuit and abnormalheat during installation.

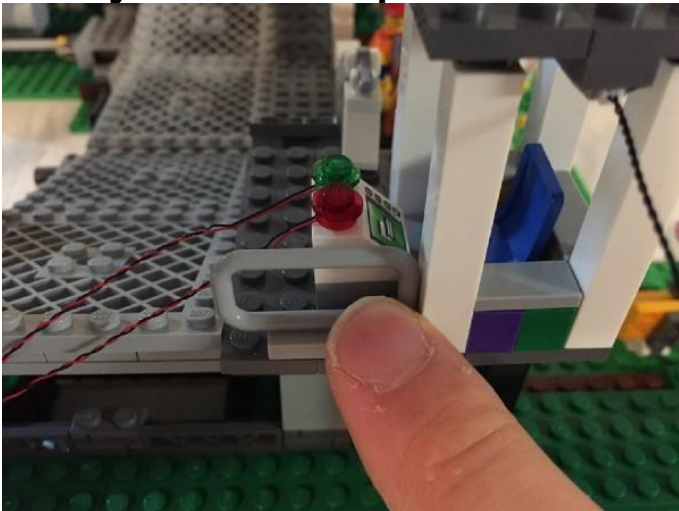
**83. Grab the Flashing White Dot Lights. Place one of them on top of the far stud on the control booth computer.**



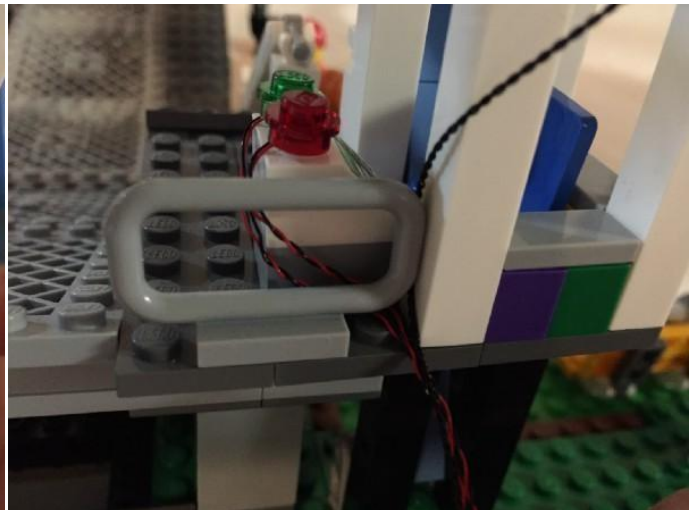
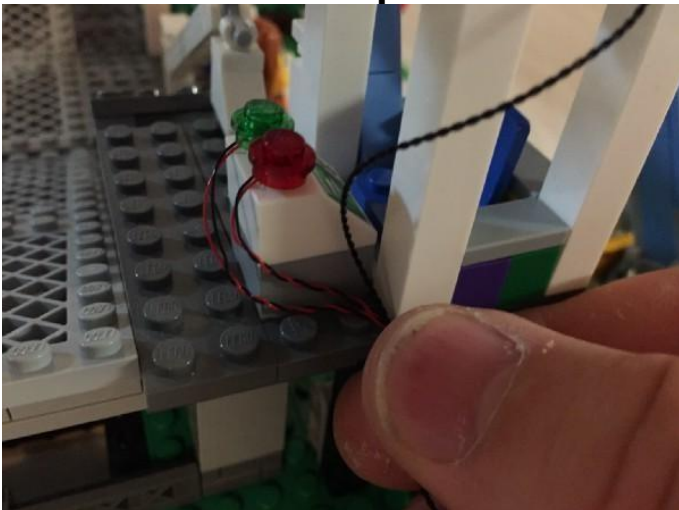
**84.** Slowly fit the transparent green 1 x 1 plate over the top of the Flashing White Dot Light.



**85.** Repeat the procedure for the other Flashing White Dot Light and slowly fit the transparent red 1 x 1 plate over the top.

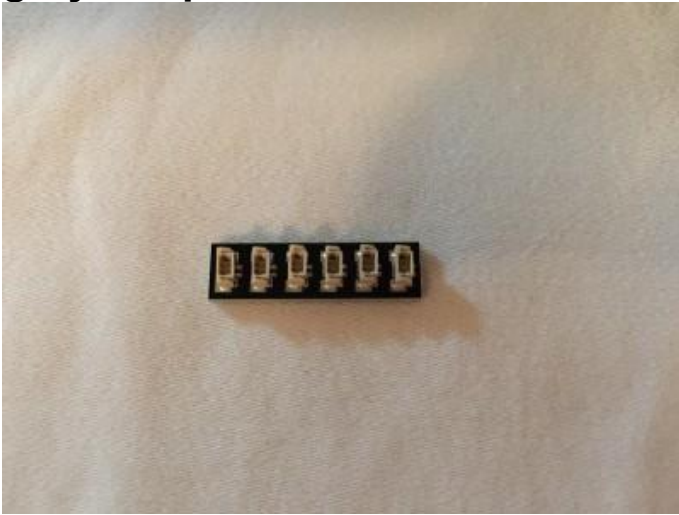


**86.** Remove the light grey bar piece from directly in front of the control booth computer.





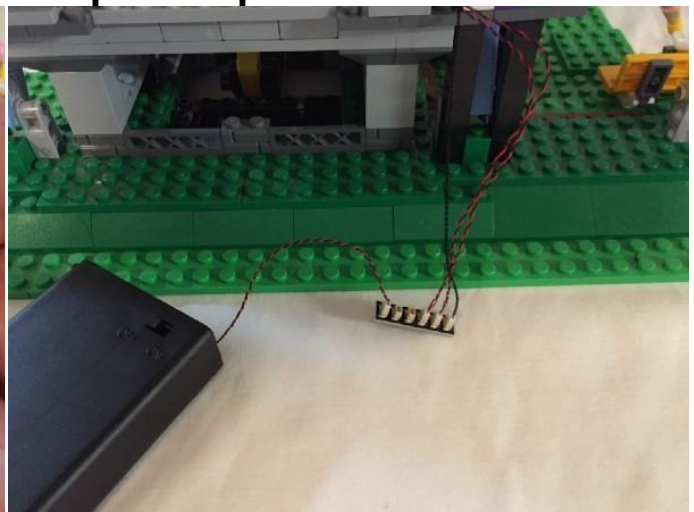
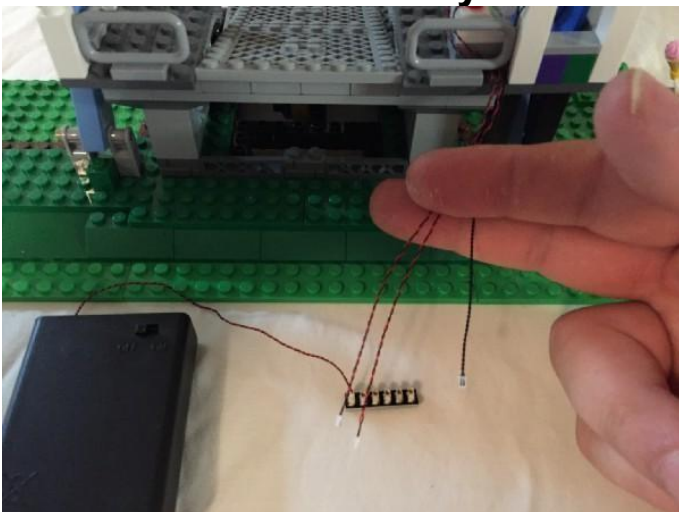
**87.** Gather the wires together from the Flashing White Dot Lights and the 15cm Connecting Cable. Hold them in the corner as seen in the picture and replace the light grey bar piece.



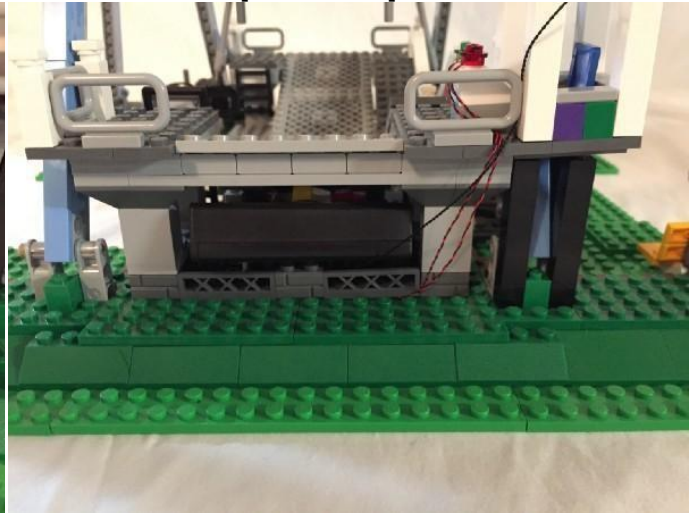
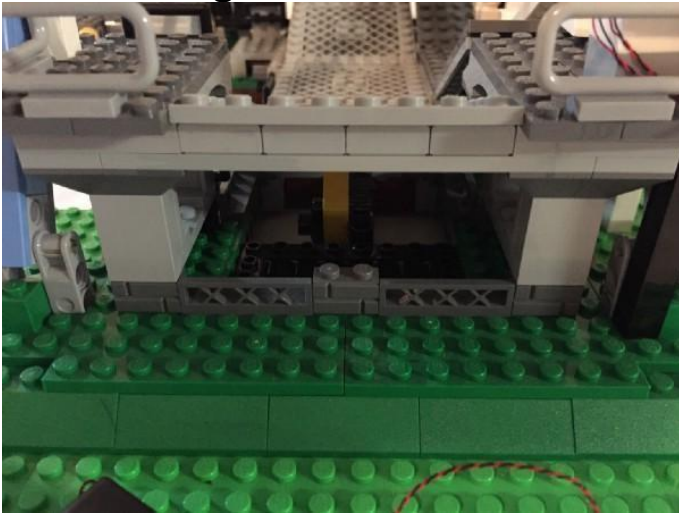
**88**



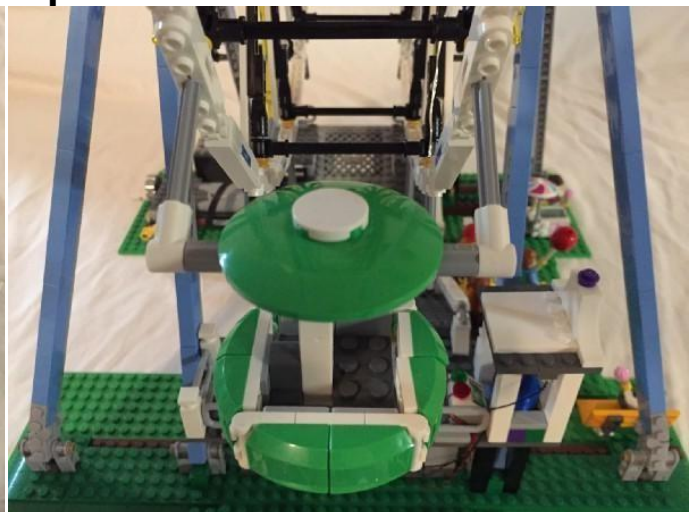
**89.** Grab the 6 port Expansion Board and the AA Battery Pack. Connect the AA Battery Pack to the 6 port Expansion Board.



**90.** Grab the wires from the Flashing White Dot Lights and the 15cm Connecting Cable and connect them to the 6 port Expansion Board.



**91.** Hide the AA Battery Pack and 6 Port Expansion Board in the available space underneath the ramps.

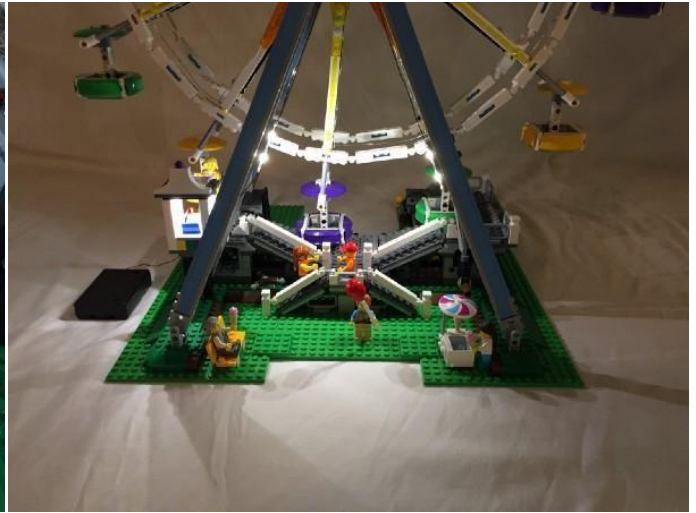


**92**





**93.** Now all you have to do is reattach your gondolas and you are good to go!



**94.** Switch on the AA Battery Pack to light up the bottom of the model.



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

