Disney Castle #71040 Remote Controller Version light kit

Package contents:

- 21 x 30cm White Dot Lights
- 7 x 15cm White Dot Lights
- 6 x LED Strip Lights
- 1 x Multi Colour Changing Light String
- 2 x Multi Colour Strip Lights
- 35 x Adhesive Squares
- 3 x 12-port Expansion Boards
- 2 x 6-port Expansion Boards
- 1x USB Power Cable

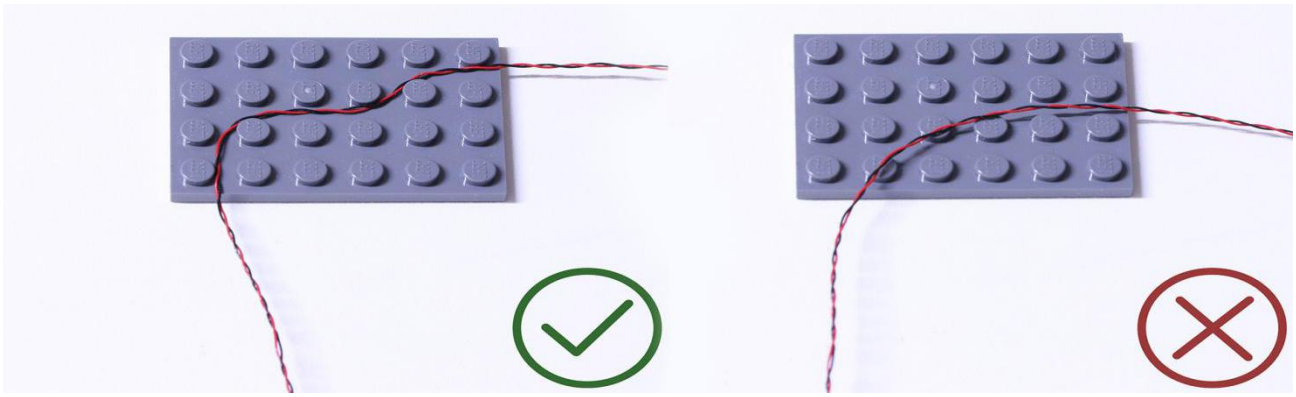
Connecting Cables

- 4 x 5cm Connecting Cables
- 6 x 15cm Connecting Cables
- 4 x 30cm Connecting Cables
- 3 x 50cm Connecting Cables
- Extra LEGO pieces
- 2 x Flicker Effects Boards
- Remote Control Switch Board

Note:

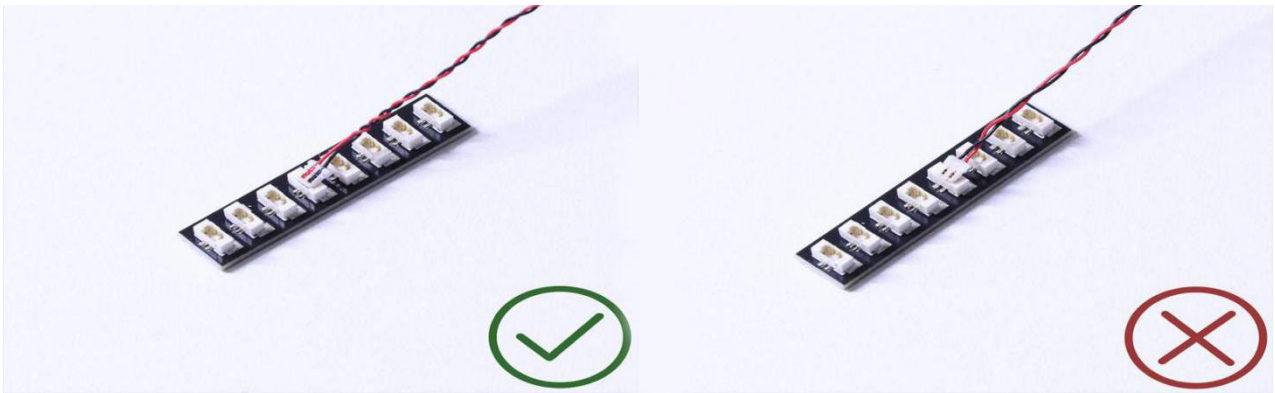
Place wires on the surface or under the LEGO building blocks.

The wire can be place between the building blocks or under the block, but they should be placed between the studs correctly.

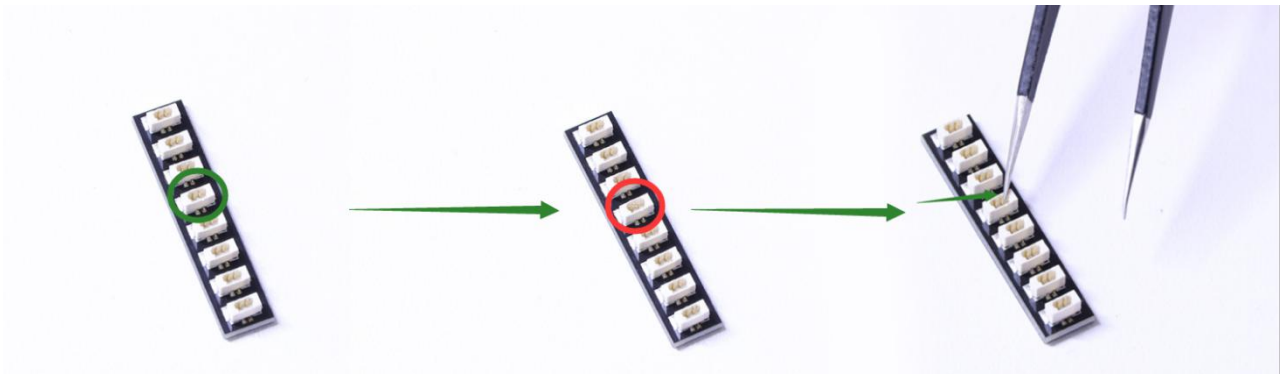


Insert the connectors to the ports.

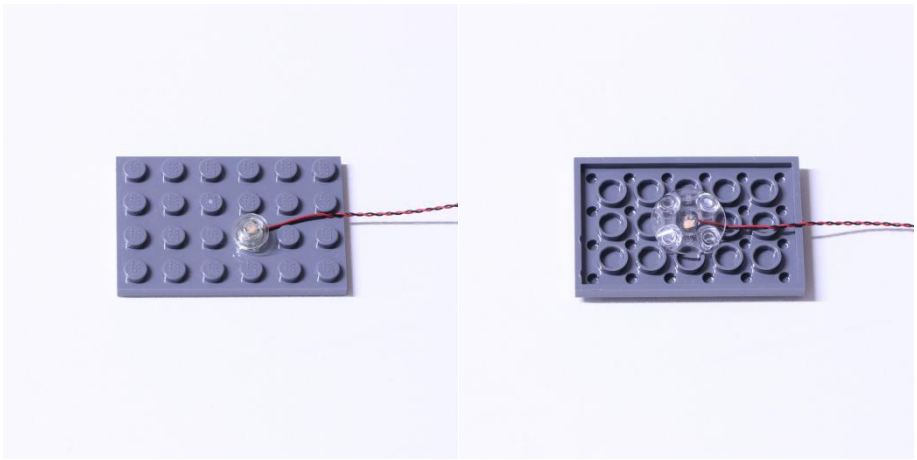
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, and don't force it, for that may result in bent pins inside the port or overheating of the expansion board.



At this point, use the tweezers to straighten the bentpins.

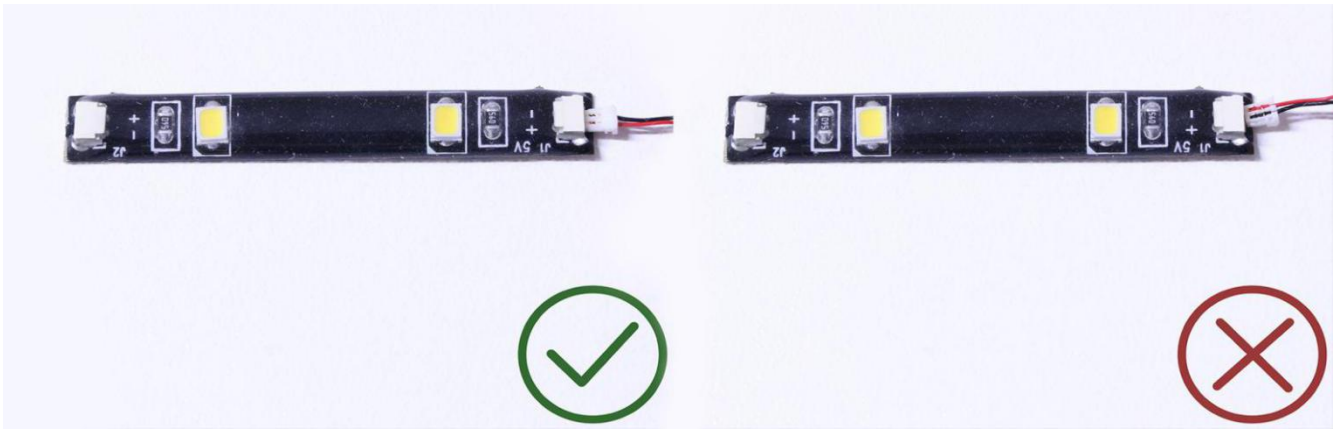


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.

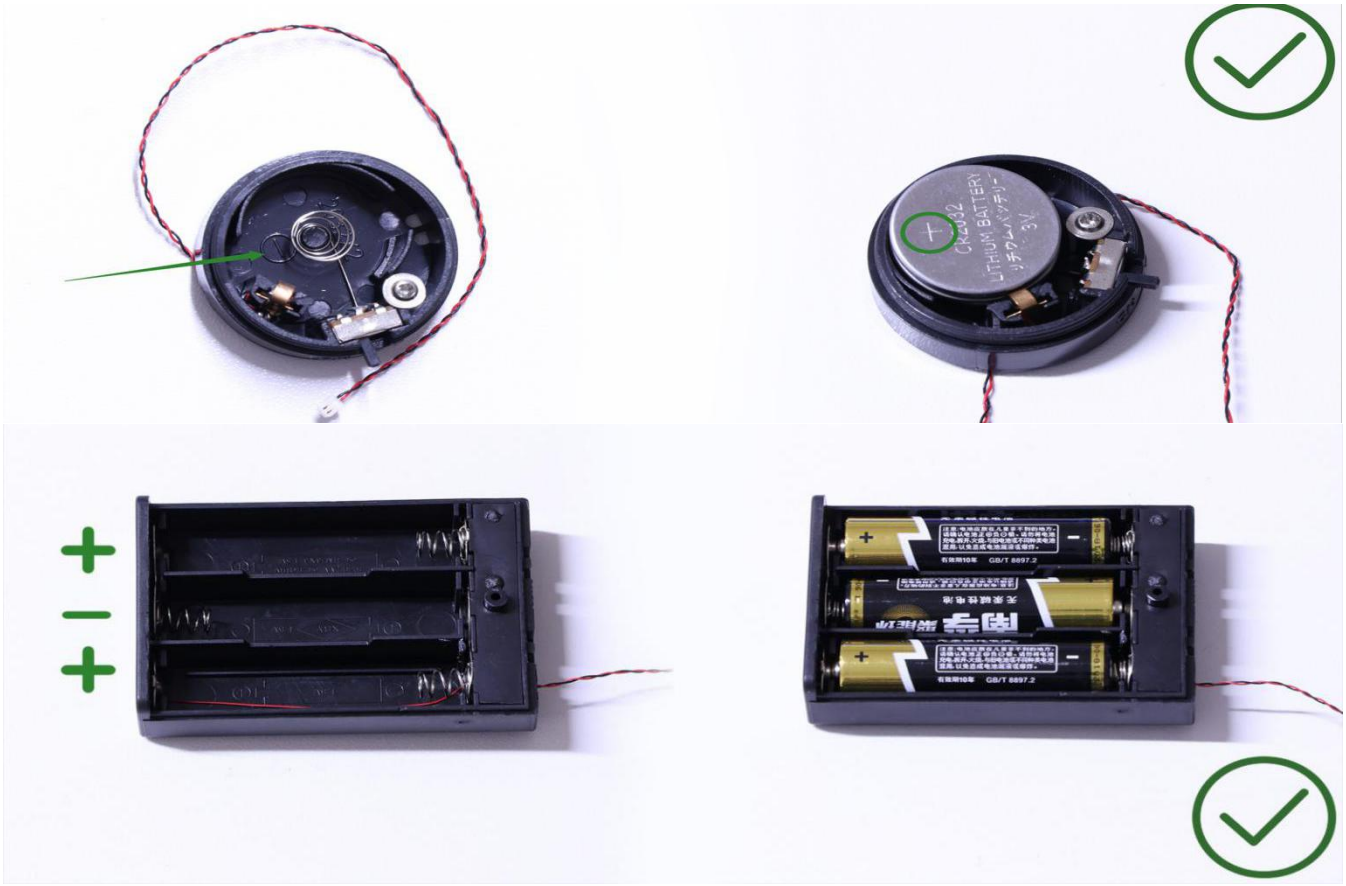


Connecting cable connectors to Strip Lights

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage the plug and the connector.



Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.

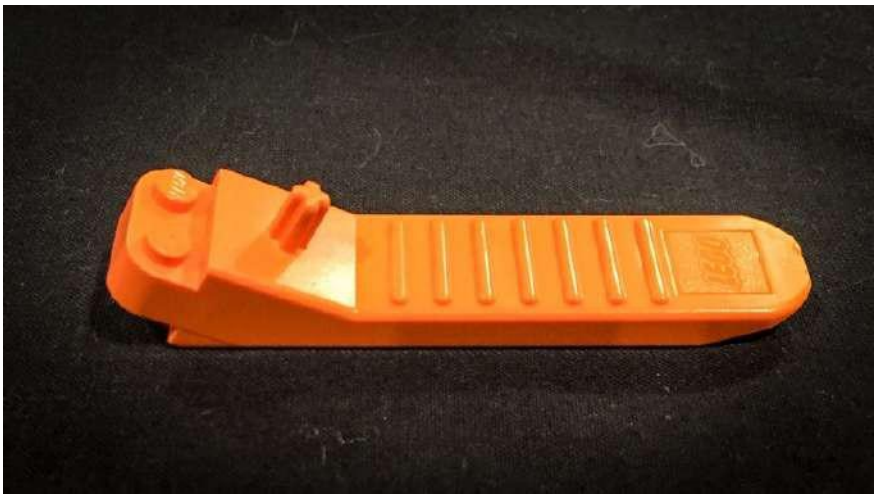


OK, Let's Begin!

Instructions for installing this kit

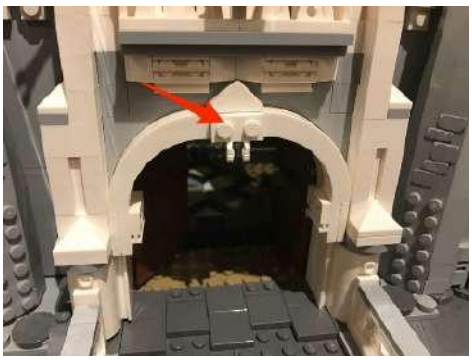
1.) We will start by installing lights to the 2 lamps at the front door. Start by disconnecting the top sections of the castle so we can work with just the base. Remove the following lamp sections as per below.

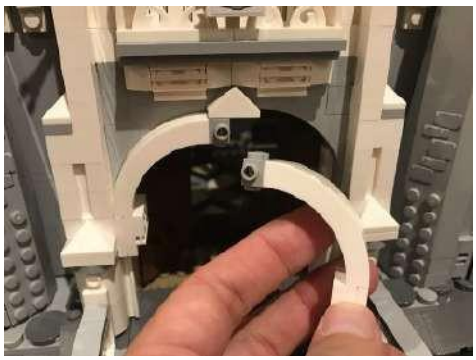
You will require a LEGO Removal Tool to assist you in removing LEGO sections and creating gaps where required.

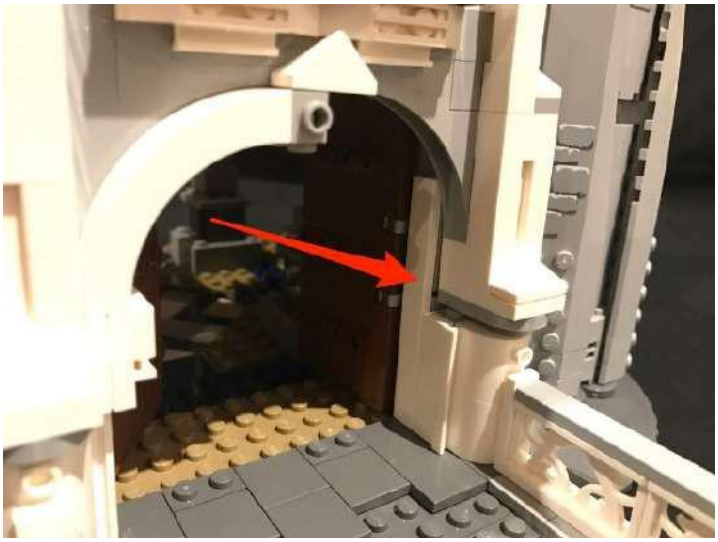


2.) Use the LEGO Removal Tool to lift and create a gap at the following position on the right side of the front door.

Remove the following sections

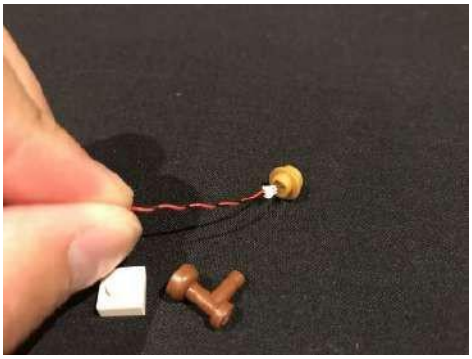


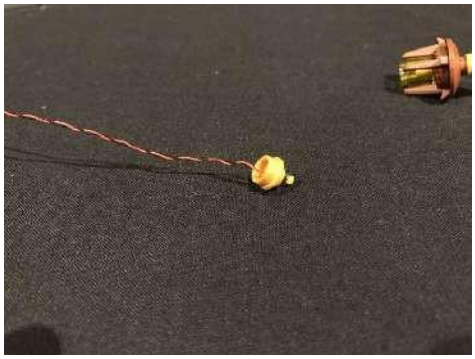




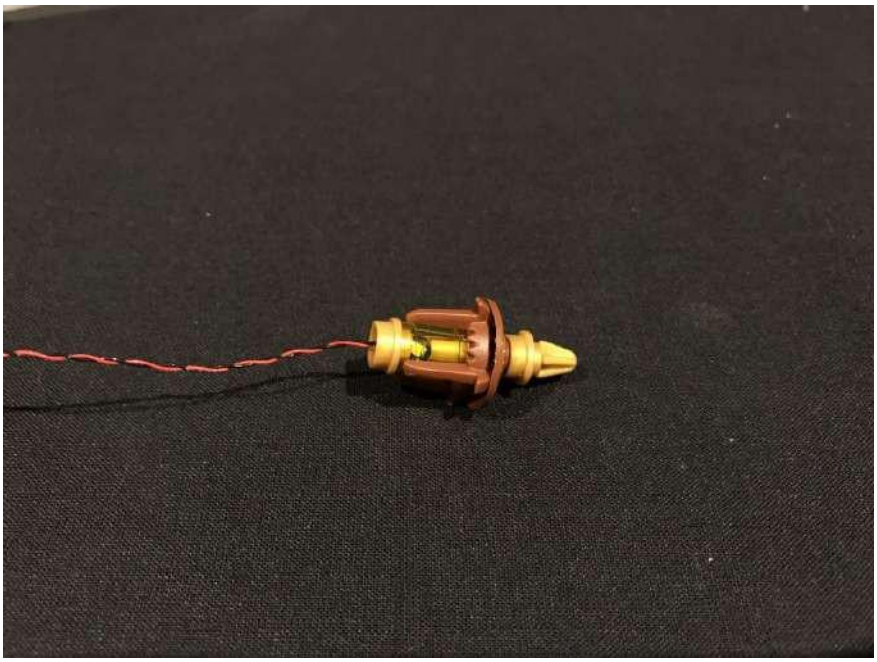
3.) Take one of the lamp sections and disassemble as per below

Take a White 30cm Dot Light and thread the connector side through the top (smaller hole) of the pearl gold round plate. Thread all the way through until the LED component of the Dot Light is right up against the bottom of the plate.



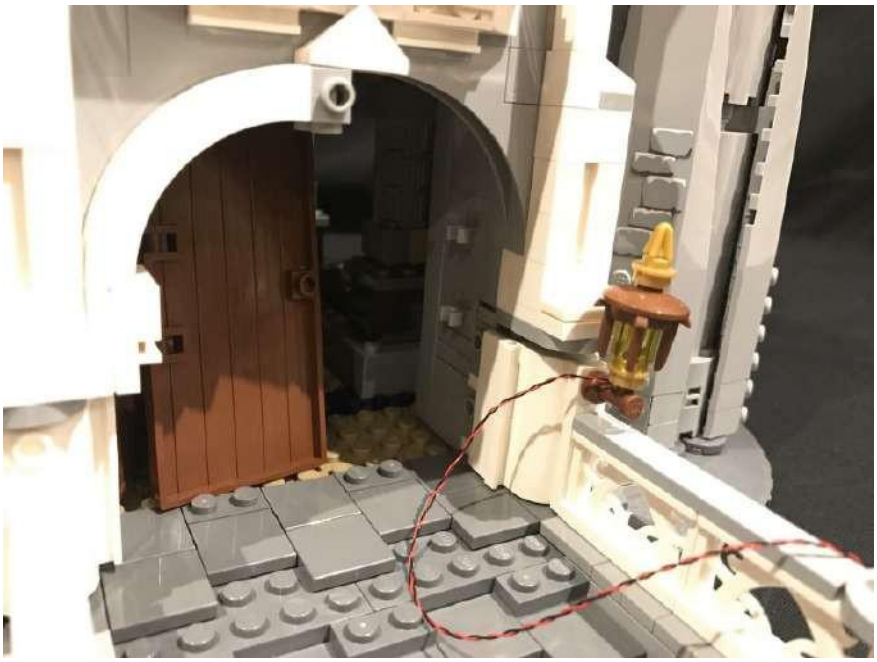


Reconnect the pearl gold plate back to the rest of the lamp ensuring the LED Component is clearly visible, then reconnect the remaining LEGO pieces to the lamp.



early visible from the front of the lamp

Reconnect the lamp with Dot Light installed back to the castle and then remove the right door.



4.) Thread the other end of the cable through to the inside of the castle and then lay the cable neatly underneath the gap we created.
Reconnect the door to secure the cable in place.

Reconnect pieces we removed earlier and then close the gap by pushing down pieces together.

5.) Repeat step 2 to remove pieces and create another gap to the left side of the door.

6.) Repeat steps 3 and 4 to install another White 30cm Dot Light to the lamp on the right, then reconnect sections and push down on bricks to close up the gap.

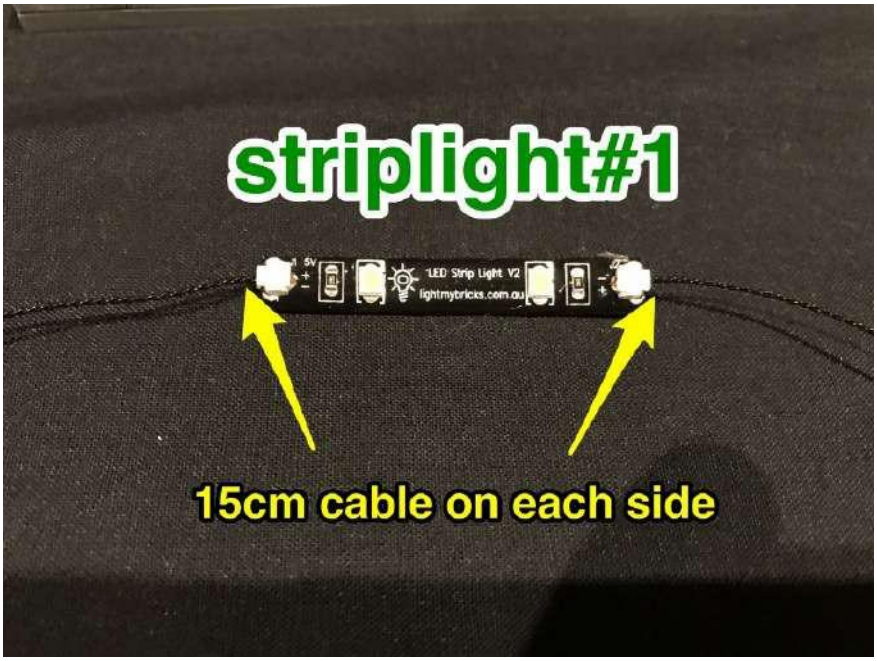
7.) Turn the castle around so that we can access the inside and then pull the cables right through from the doorway.

Remove the following tiles from the base of the second koor and then remove the 6x8 plate from the middle, followed by the 2x10 plate behind.

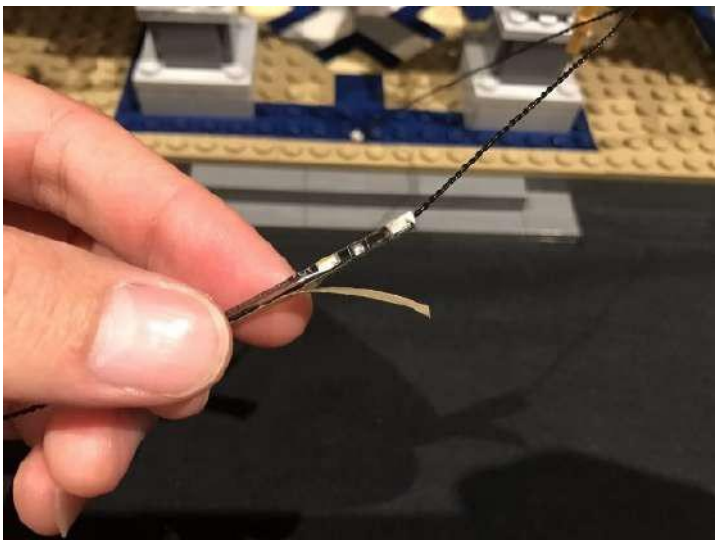
Thread the 2 cables from front door up this space we have created and then set aside.

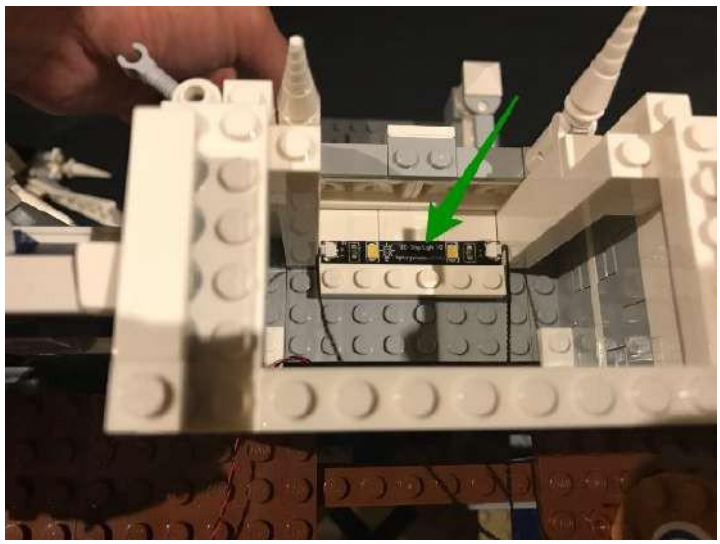
8.) Use the LEGO removal tool to lift and remove the middle section as per below.

Take a Strip Light and connect a 15cm connecting cable on each port (total 2x connecting cables). Since we are using several strip lights in this lighting kit, we will identify this one as striplight#1

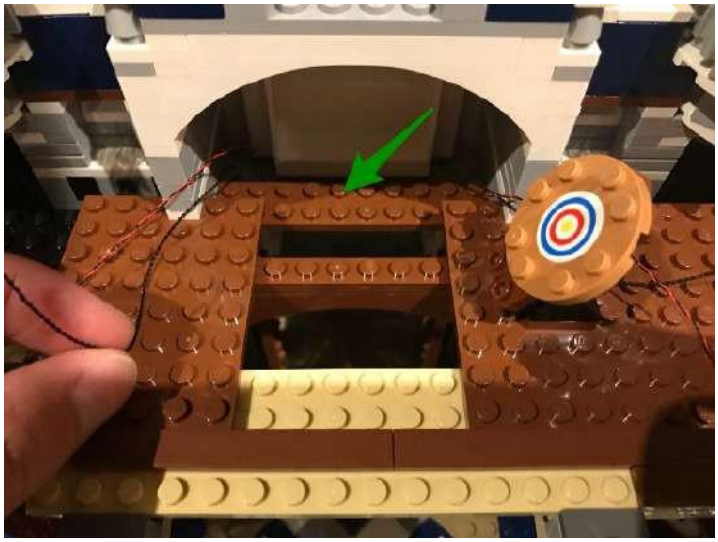


Peel ofl the adhesive backing paper and to allow us to stick it to the base of balcony as close as possible to the 1x6 plate

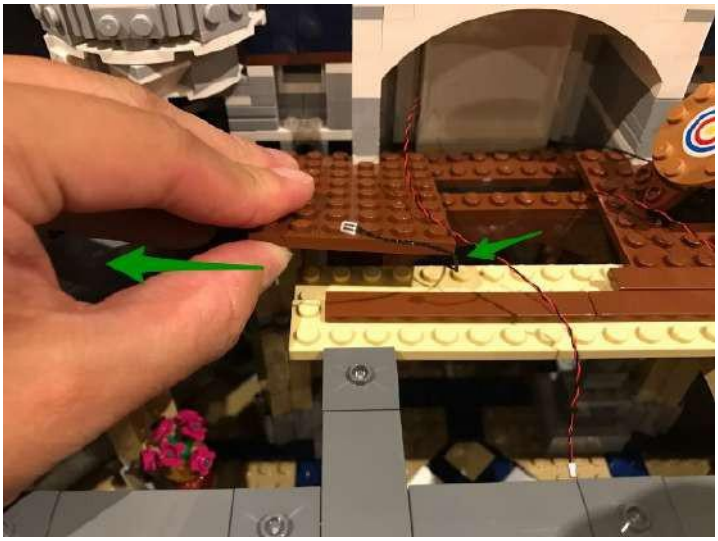




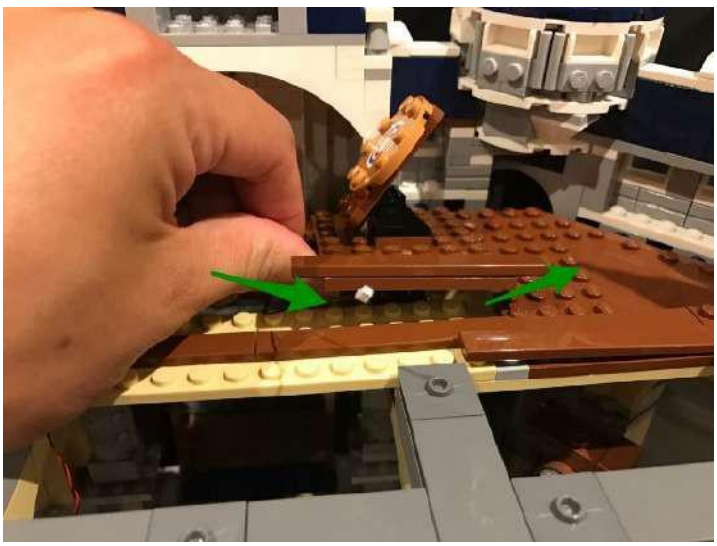
Pull the connecting cables over before reconnecting the 2x10 brown plate and middle section we removed earlier

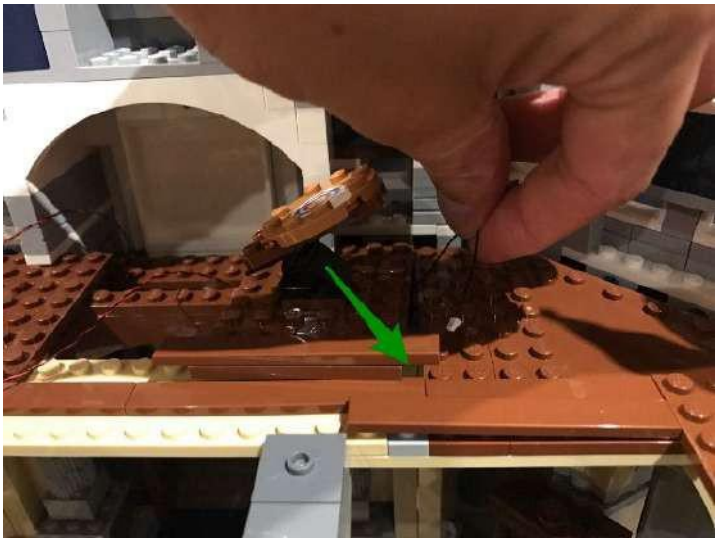


9.) Remove the following sections of the base of the second koor and then thread the connecting cable from the left port on striplight#1 underneath the 6x8 plate (but over the beam below) through to the left side.



Repeat this process for the right section and cable from the right port on striplight#1.

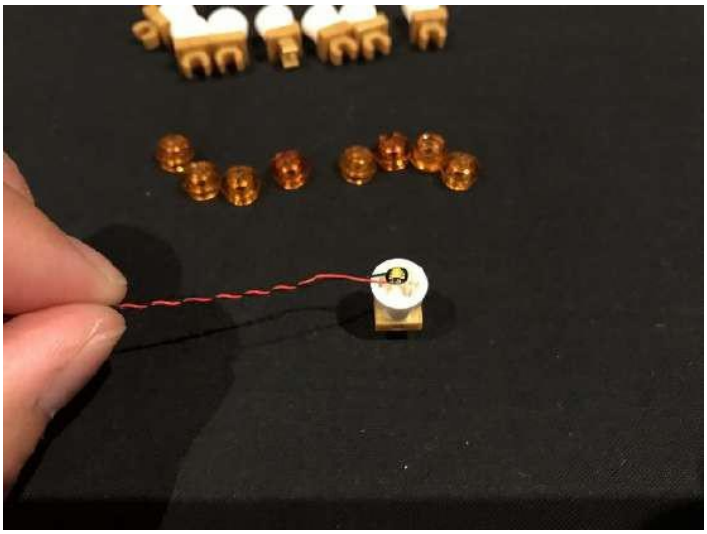


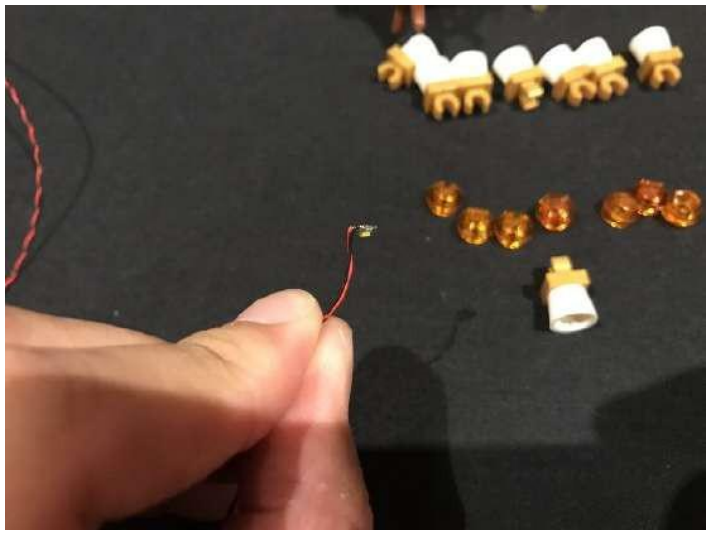


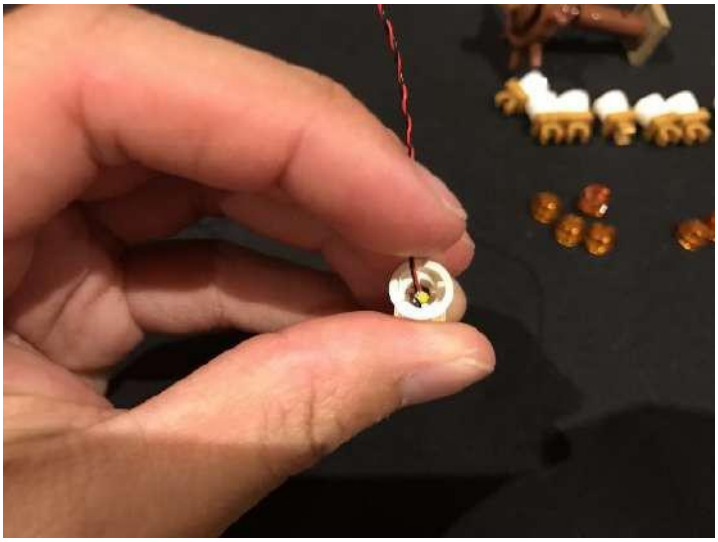
10.) We will now install lights to the chandelier. First remove this entire section at the 2x2 plate and then disassemble pieces as per below:

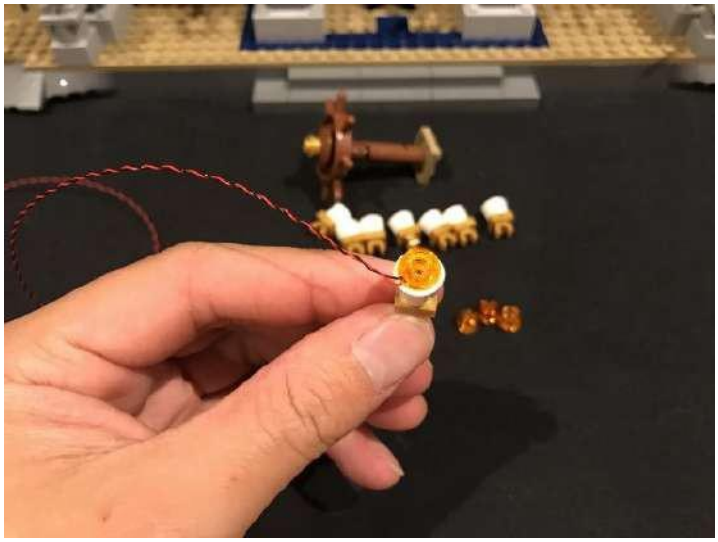
Take out 8 of the provided trans orange round plates which came in this set.

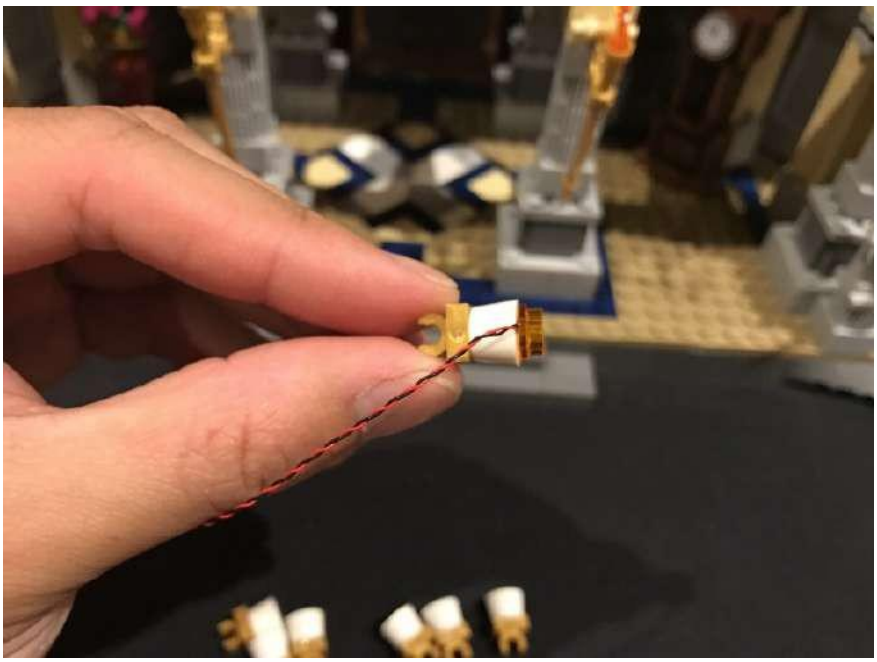
11.) Take a White 30cm Dot Light and then bend the LED component on a 90 degree angle with the component face up. Place the Dot Light inside one of the white round pieces and then secure by connecting a trans orange plate directly over it.



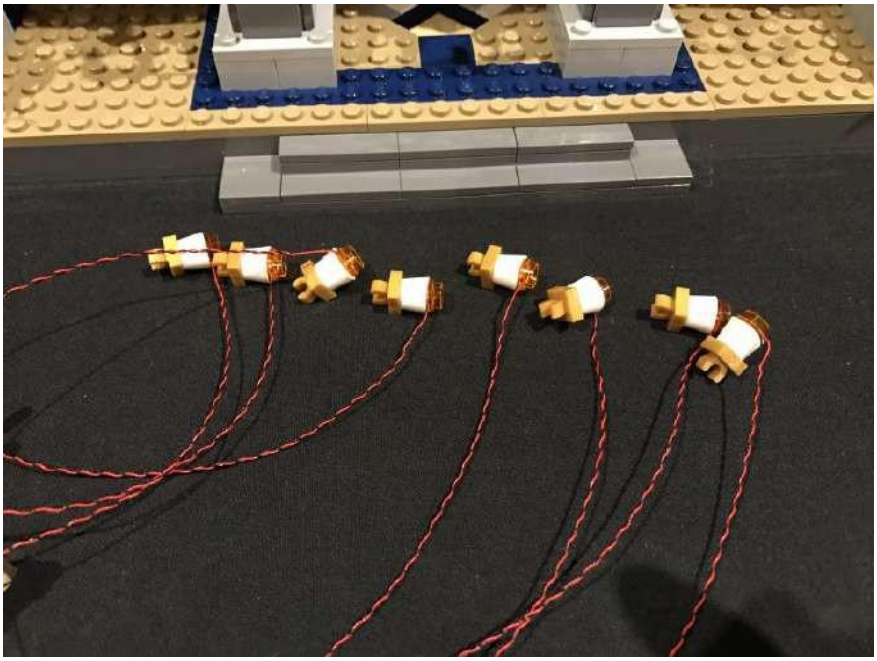




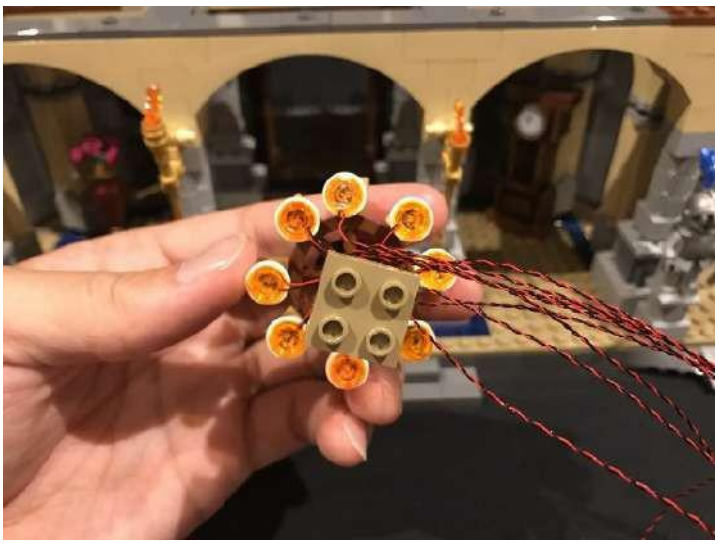




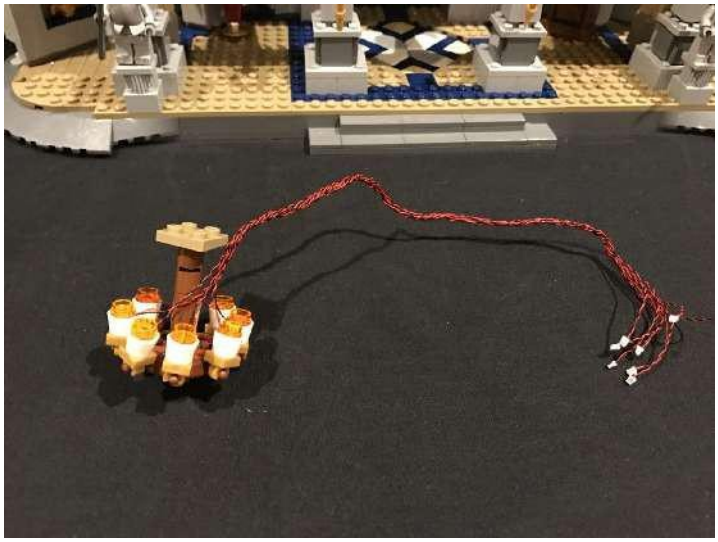
Repeat the above process to install another 7x White 30 Dot Lights
using provided trans orange round plates to secure.



12.) Connect each light section back to the wheel ensuring each cable is facing toward the centre of the wheel.

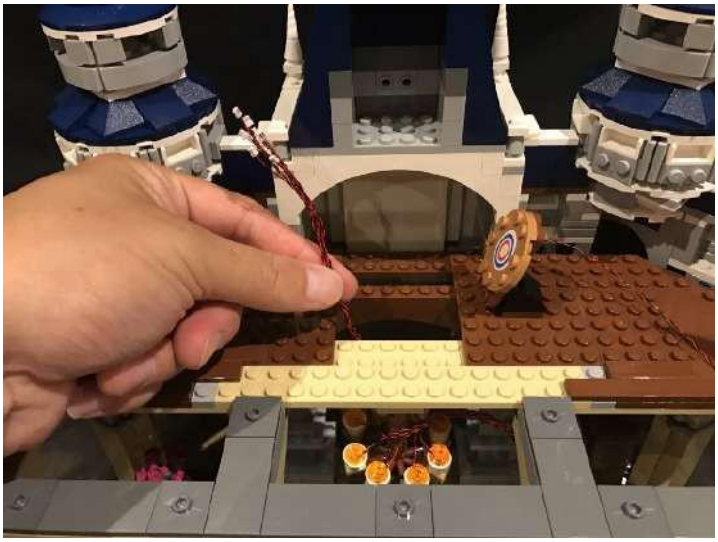


Group all the cables together and then twist/wind them around each other so that they all come together to form one large cable.

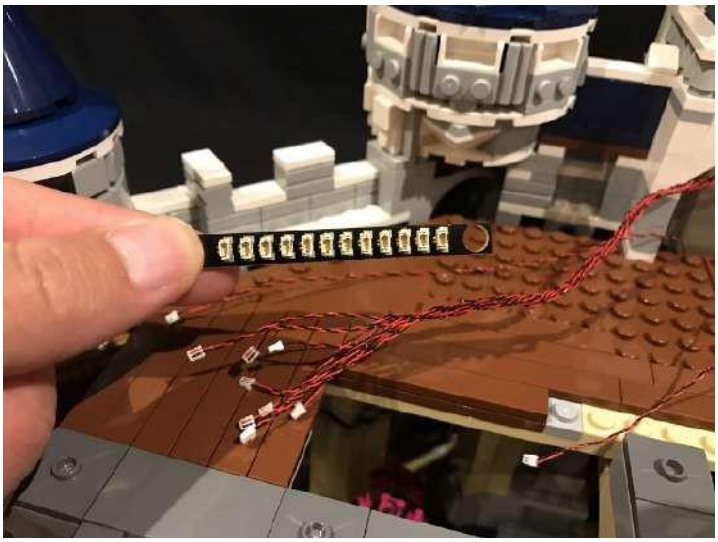
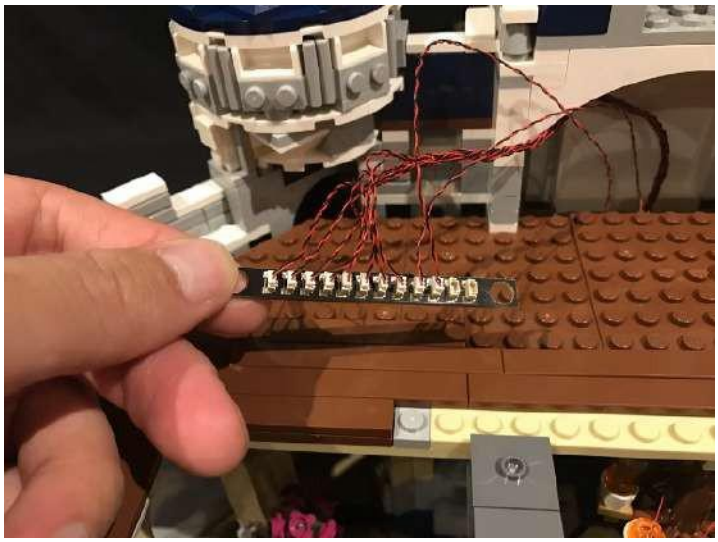


Reconnect this section back to the roof of the ground koor.

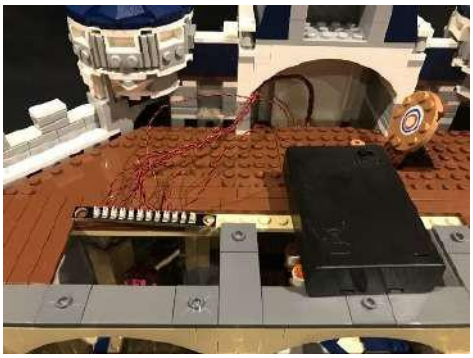
13.) Bring the cables of the chandelier toward the front of the castle and then thread the cables up the space which leads to the second level. Lay the cables in between studs of the first brown brick before reconnecting the middle 6x8 plate directly over the top as well as the brown tiles we removed earlier.



14.) Take a 12-Port Expansion Board and then connect all lights from the chandelier as well as the 2 front door lights we installed at the start into available ports of the expansion board.

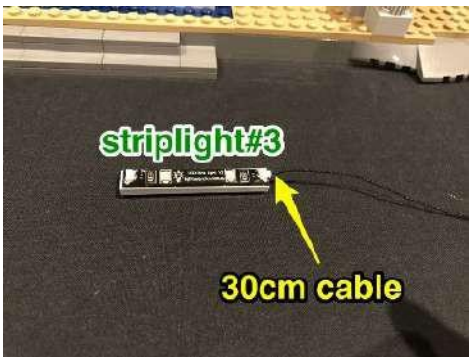



This is now a good time to test the lights we have installed so far. To do this take the USB Power Cable and connect it to your USB Power Bank. Connect the other end of the USB Power Cable into a spare port on the expansion board and turn on to confirm all the lights are working OK.



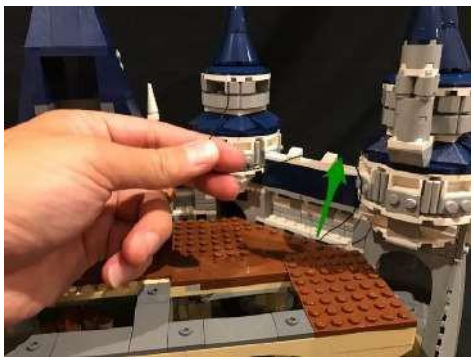
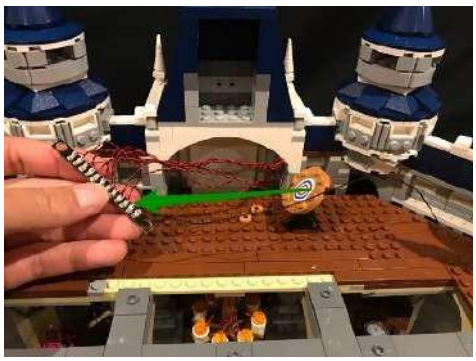
15.) Let's move onto lighting the rest of the ground koor. Take a Strip Light (striplight#2) and then stick it onto a provided 1x6 plate.
Connect a 5cm connecting cable into one of the ports. Take this strip light and connect the loose 15cm cable hanging from the left side of the roof into the spare port and then mount to the roof in the below position. Ensure the 5cm connecting cable is facing the right.

16.) Take another Strip Light (striplight#3) and stick to a 1x6 plate. Connect a 30cm connecting cable to one of the ports on the strip light. Take this strip light and connect the loose 15cm cable hanging from the right side of the roof into the spare port and mount to the roof in the below position. Ensure the 30cm connecting cable is facing the right.



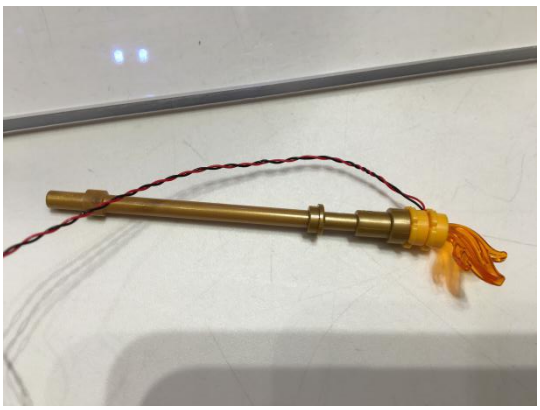
You can prevent the cable from hanging down by looping them behind the strip light like what I have done here

Thread the other end of the 30cm cable up behind the back wall which leads up to the level above. Pull up from underneath and then connect the cable into one of the spare ports on the 12-port expansion board.

Take this time to test our lights we have installed so far by connecting back the USB Power Cable to the expansion board and verifying all is OK.

17.) We will now install lights to the 2 fire torches. First remove them and then disassemble pieces as per below:



Reconnect these 2 sections back to the poles and then back to the pillars ensuring the cables are behind.

18.) We now need to thread the cable for each torch underneath the pillars at the below position.

To do this, use your LEGO removal tool to lift and create a gap opening to allow you to thread the Dot Light cable through the middle in between studs. Once threaded through close up the gap by reconnecting down the pillars.

Repeat this process for the torch cable on the other side.

Before proceeding to the next steps, please take note of which eGects board option was included in your lighting kit:
Eßects Boards option 1 (This is now retired) : Steps 19–20

2x Multi-EGects Board

1x 6-port Expansion Board

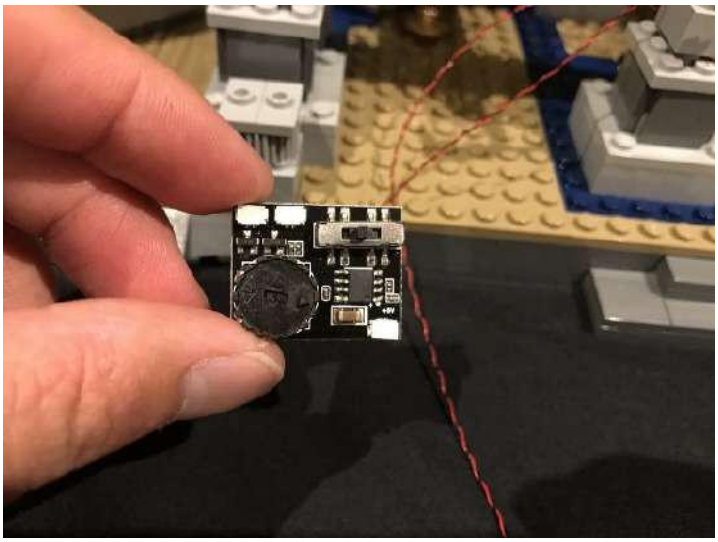
1x 5cm Connecting Cable

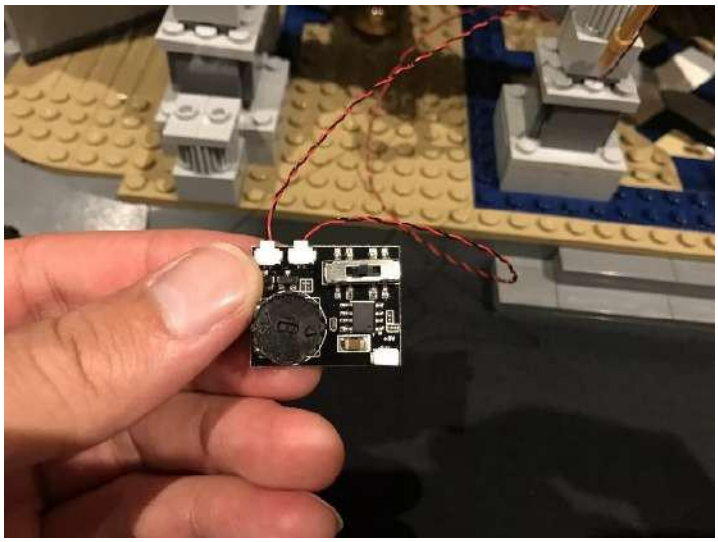
or

Eßects Boards option 2: Steps 21–22

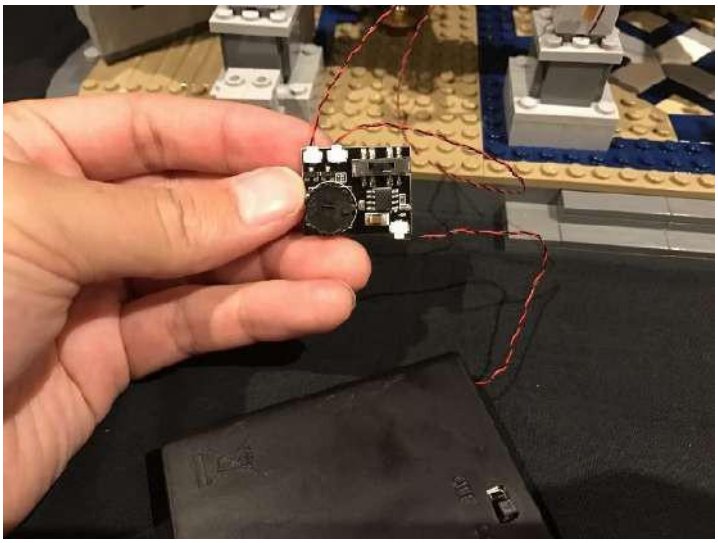
2x Flicker EGects Boards (FFX)

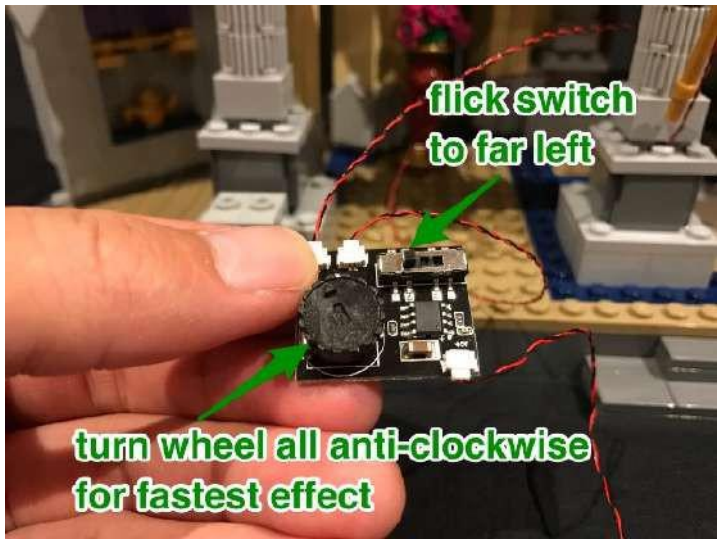
19.) If your lighting kit contains the EGects Board 1 option, then take out one of the Multi-EGects Boards and connect the torch cables into the 2 output ports as shown below:





Take the battery pack cable and connect it to the input port at the bottom. Turn on the battery pack and you should see the torches light up with one of the 3 eflects. Switch to the “kicker” eflect on the far left and then adjust the speed of the eflect by turning the wheel as desired. The eflect used in the Vonado demo video is with the wheel turned all the way to the left.

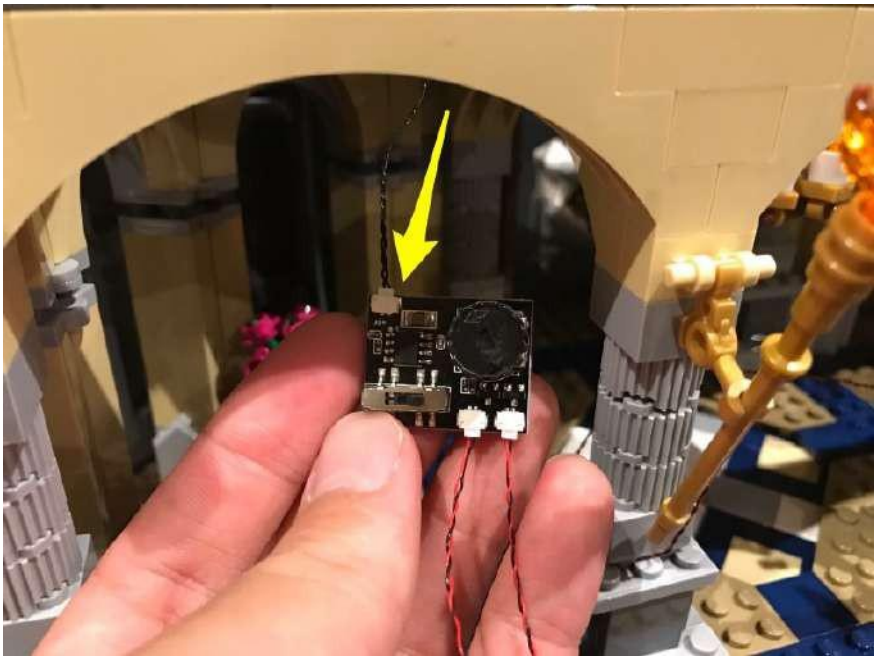


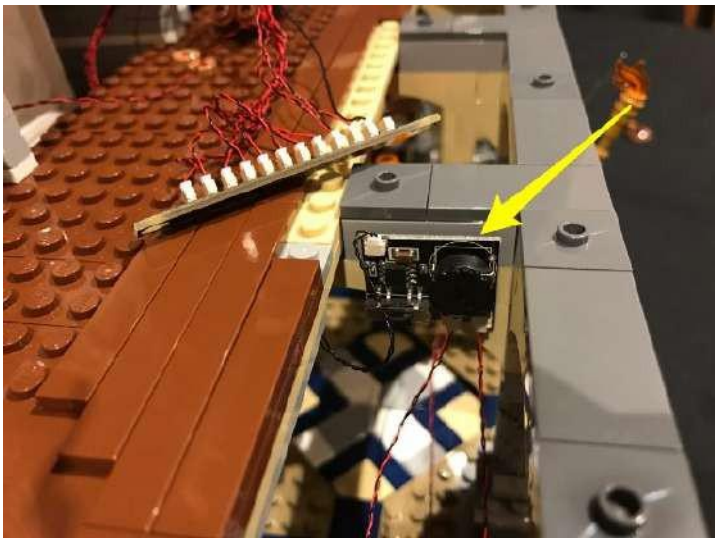


When you are satisfied with your eflect and speed, disconnect the battery pack and proceed to the next step.

20.) Locate the 5cm cable from striplight#2 hanging from the roof and connect this into the input port on the multi-eflects board. Use 2x provided Adhesive Squares to mount the eflects board to the top of the wall

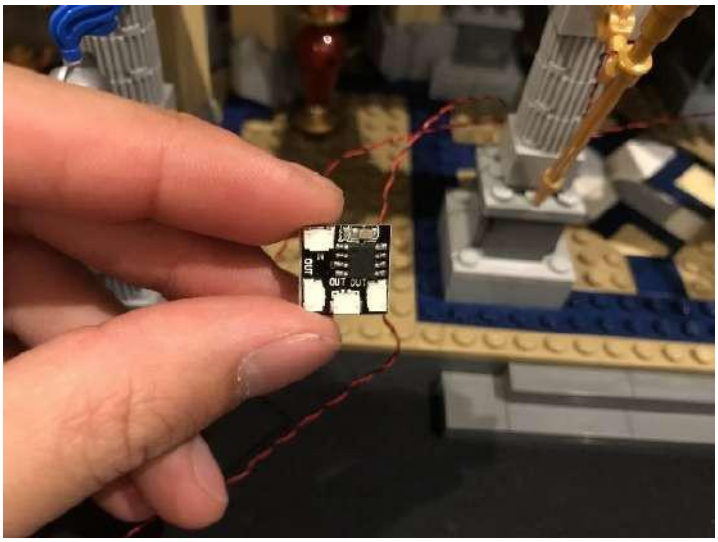
in the below position.

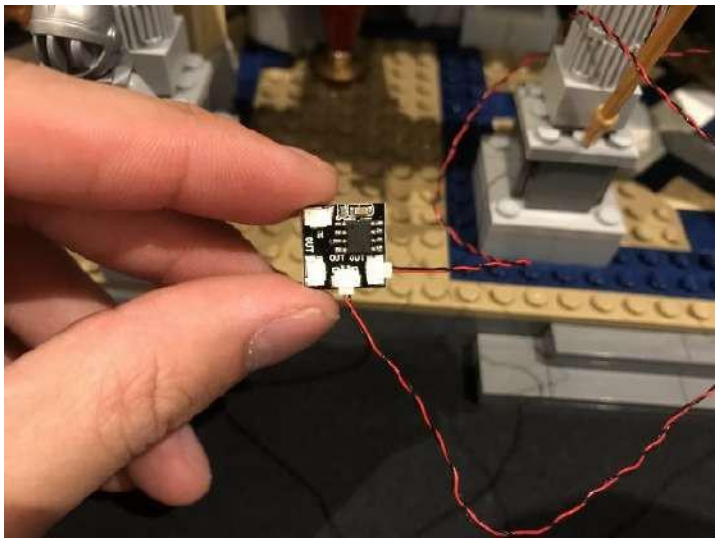




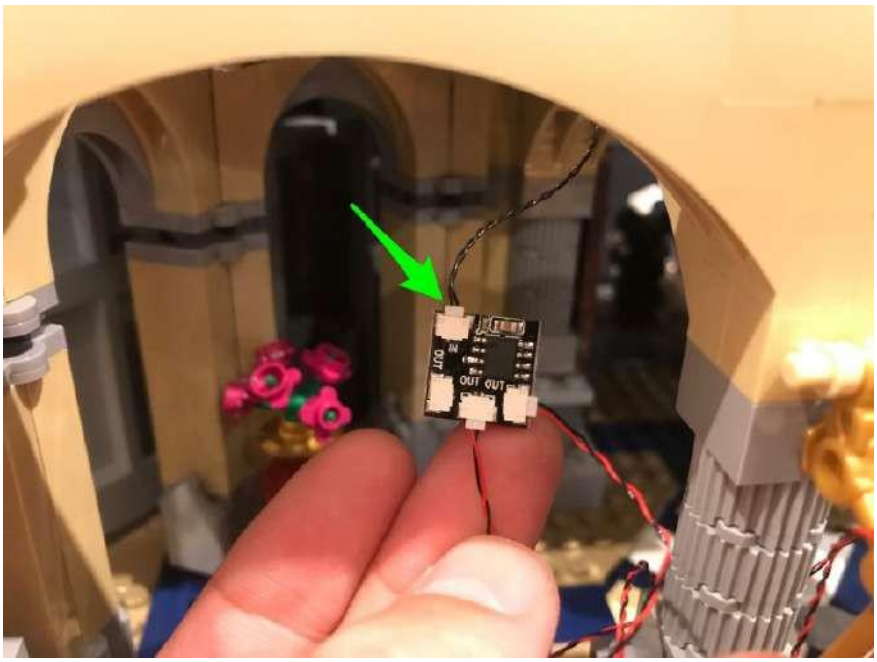
Proceed to step 23.

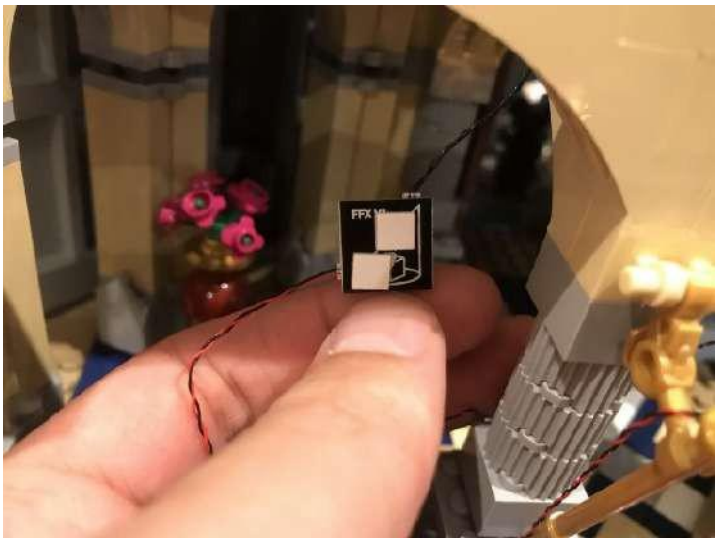
21.) If your lighting kit contains the EGects Board 2option, then take out one of the Flicker EGects Boards and connect the torch cables into the any 2 output ports as shown below:

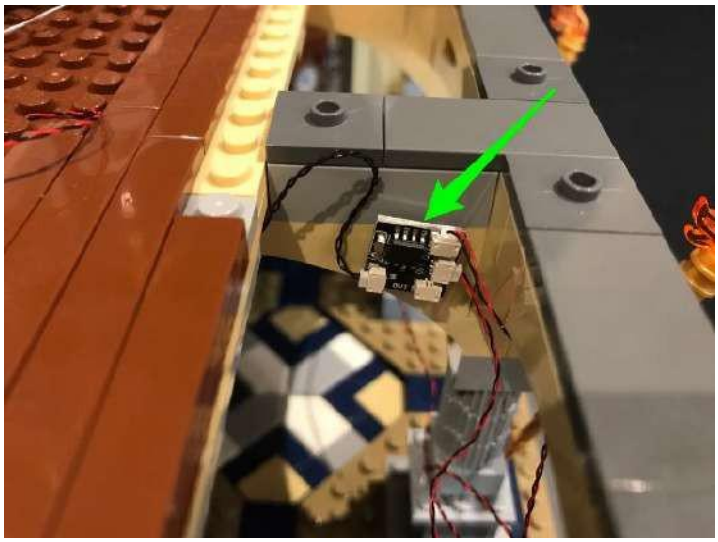




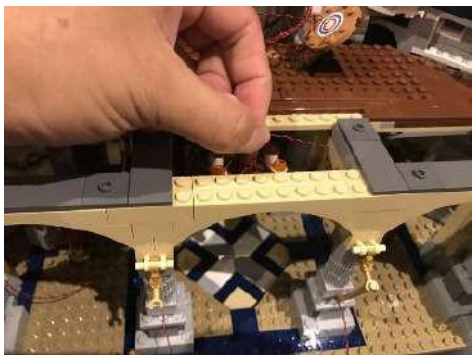
22.) Locate the 5cm cable from striplight#2 hanging from the roof and connect this into the input port on the kicker eflects board. Use 2x provided Adhesive Squares to mount the eflects board to the top of the wall in the below position.

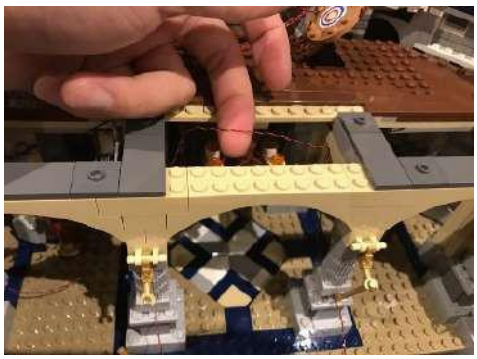


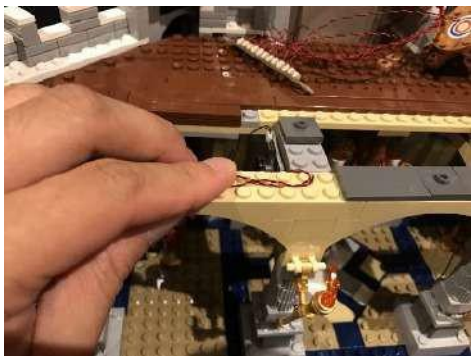




23.)We now need to eliminate excess cables from the 2 torches. To do this, bring the cables up and lay them underneath the grey tiles on the roof of the ground koor. You will need to first disconnect tiles, lay the cables in between studs, then reconnect the tiles over the top of them as shown below.

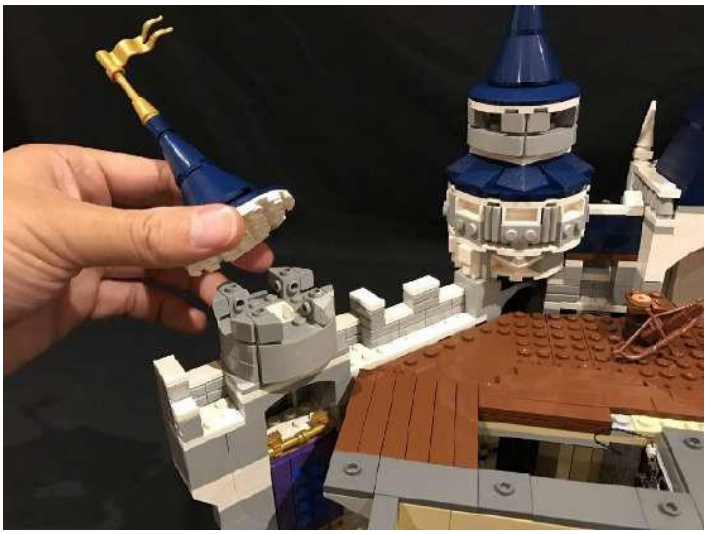


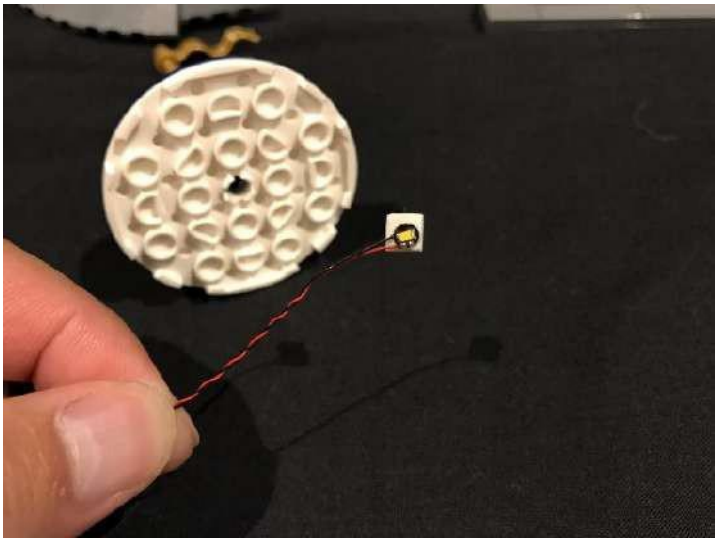


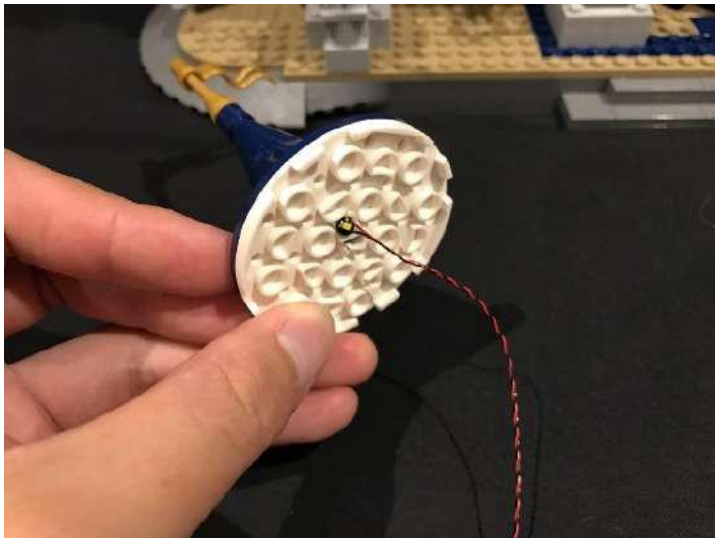


Test all the lights and eflects are working together by connecting the USB Power Cable to the expansion board above. Turn on and verify all is OK.

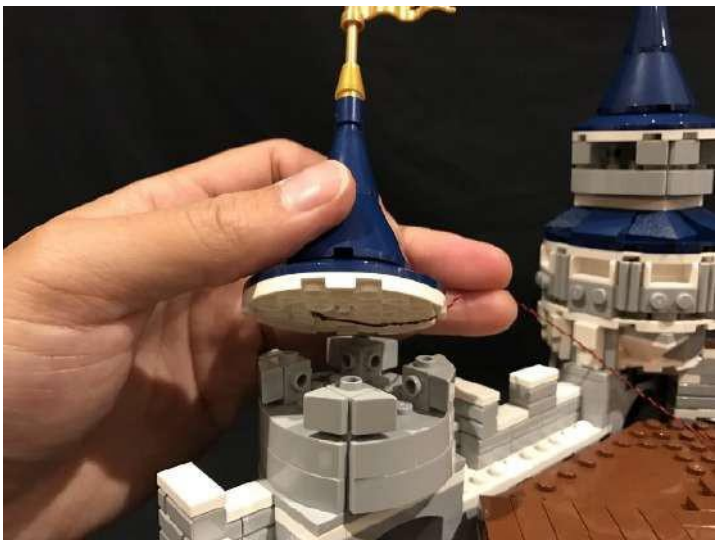
24.) We will now move onto installing lights to each of the towers on the first koor. Remove the roof ofl the far left tower from the round white base as per below. Take a White 30cm Dot Light and stick underneath the white round plate in the below position using an adhesive square.



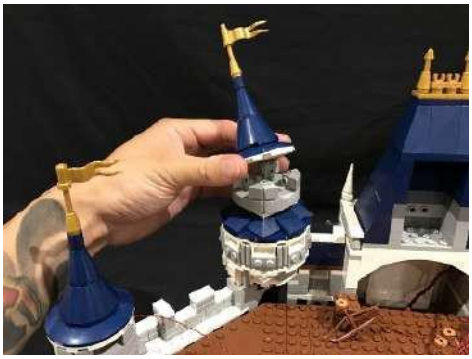




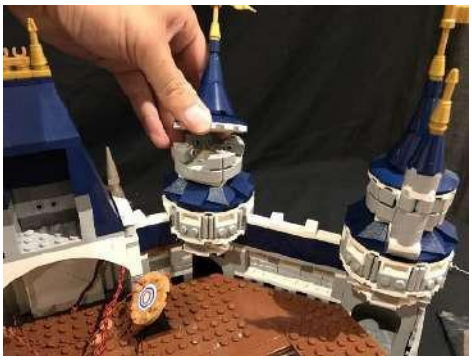
Reconnect this roof section back to the tower ensuring the cable for the Dot Light is laid over the grey bricks underneath toward the right.

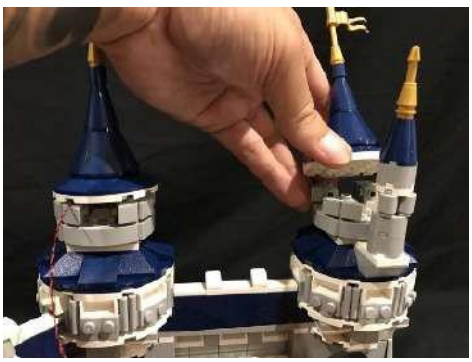


Remove the roof ofl the next tower along and install another White 30cm Dot Light underneath the white round base using an adhesive square. Reconnect roof with cable in between the white round plate and grey brick underneath facing toward the centre.



25.) Repeat previous steps to install another 2x White 30cm Dot Lights for the two towers on the right side using adhesive squares(one Dot Light each).

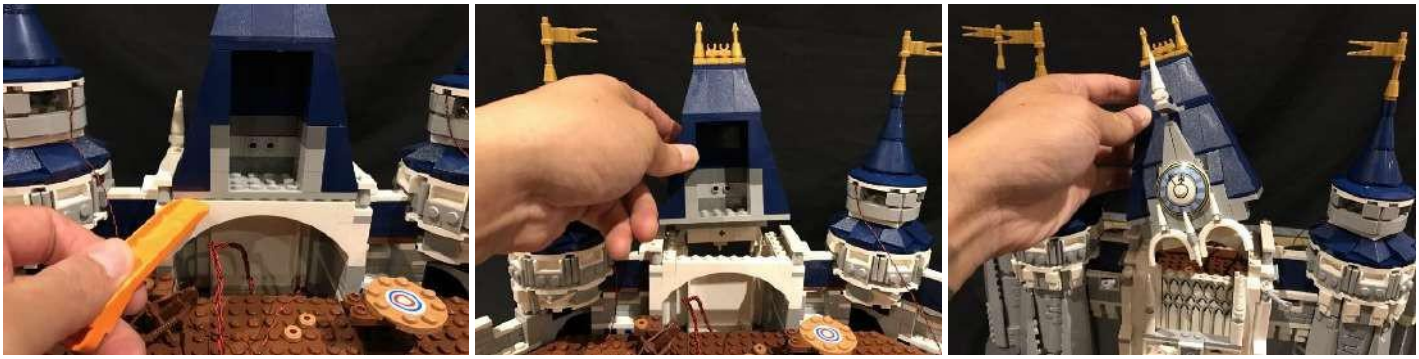




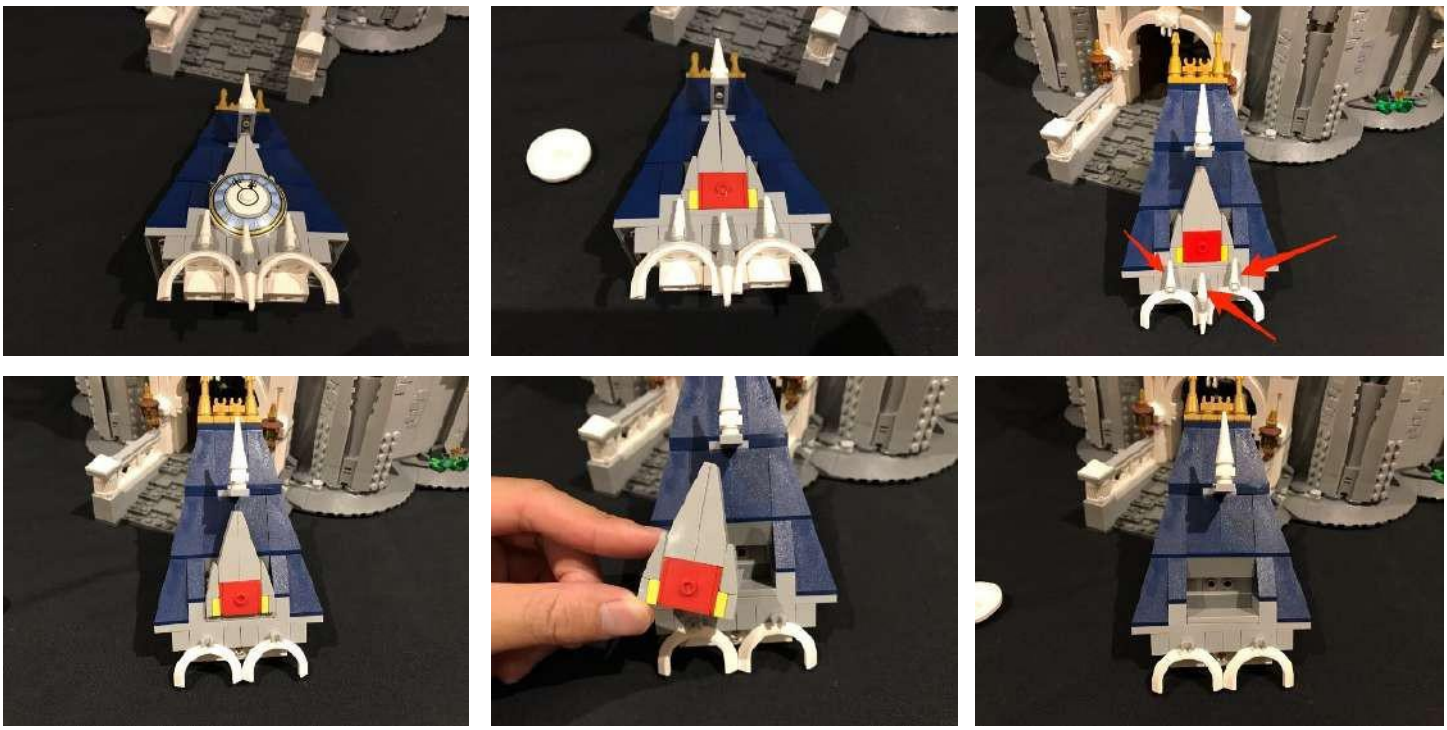
You can use tape to neaten up and secure the cables to the sides of the tower.

26.) We will now install a light to the clock on the front. First remove the sections on each side of the front of the tower as per below.

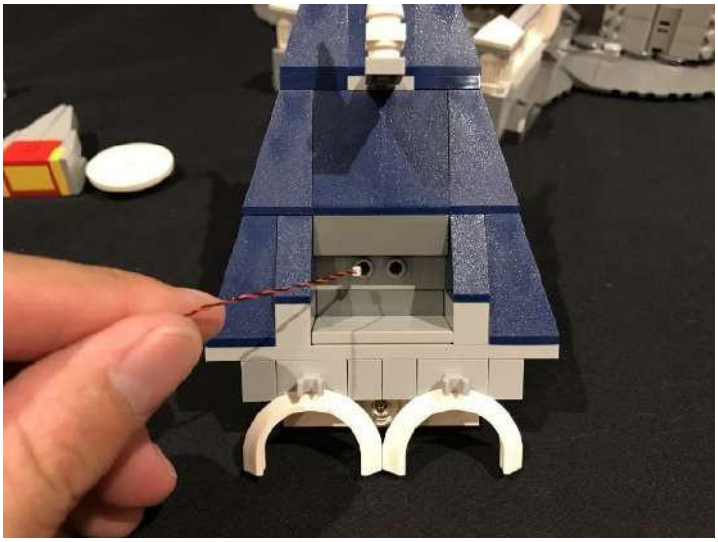
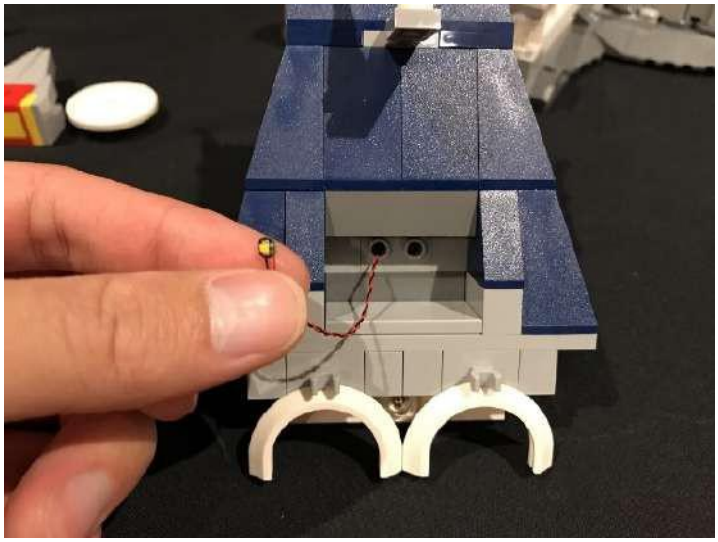
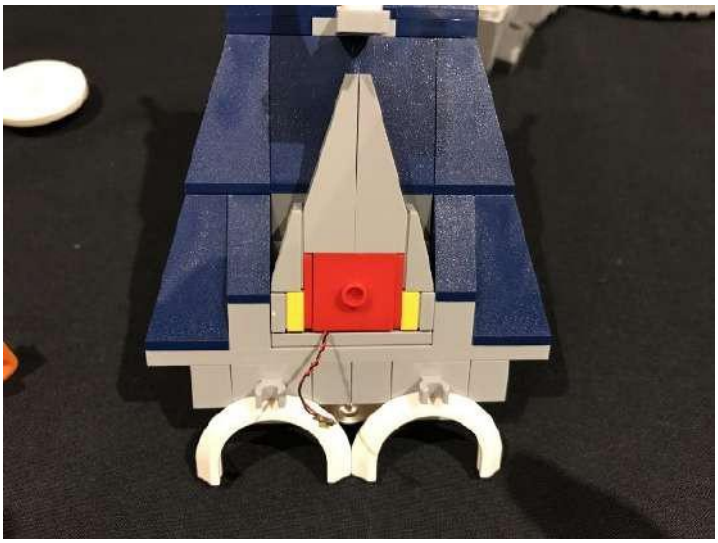
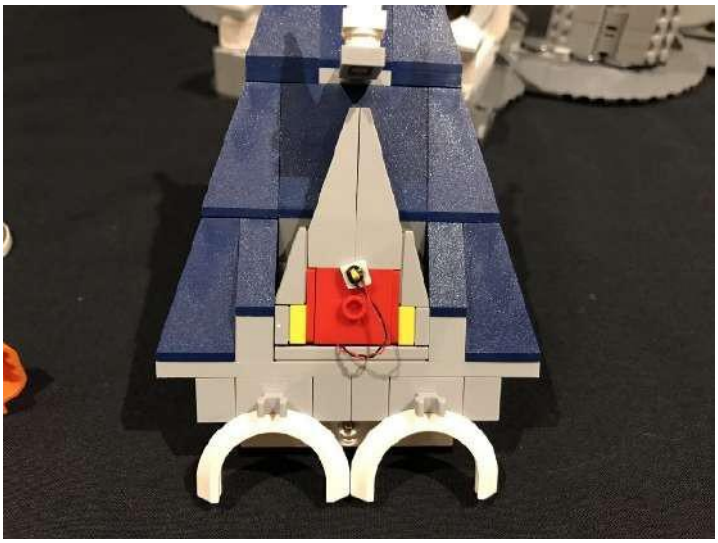
From the back of the castle, use the LEGO removal tool to lift this section ofl at the following position.



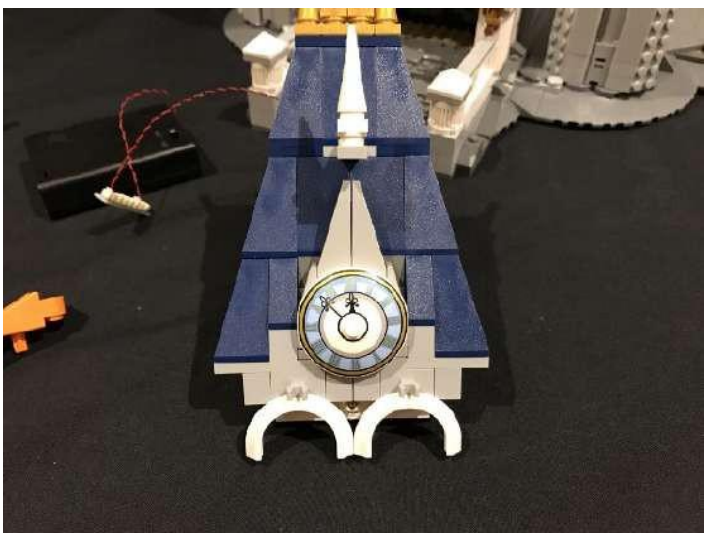
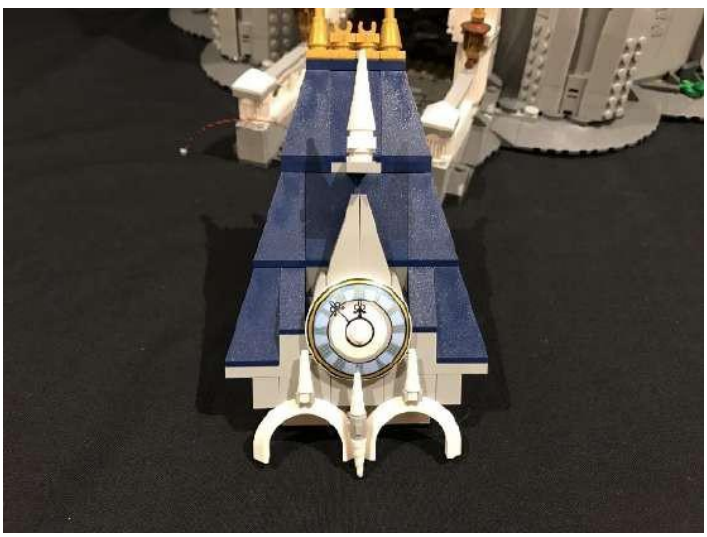
Remove the clock piece as well as following pieces from the front.



27.) Take a White 30cm Dot Light and thread the connector side through one of the holes of the grey holes behind. Thread all the way through until you have about 5cm cable left. Stick the Dot Light to the following position using an adhesive square.

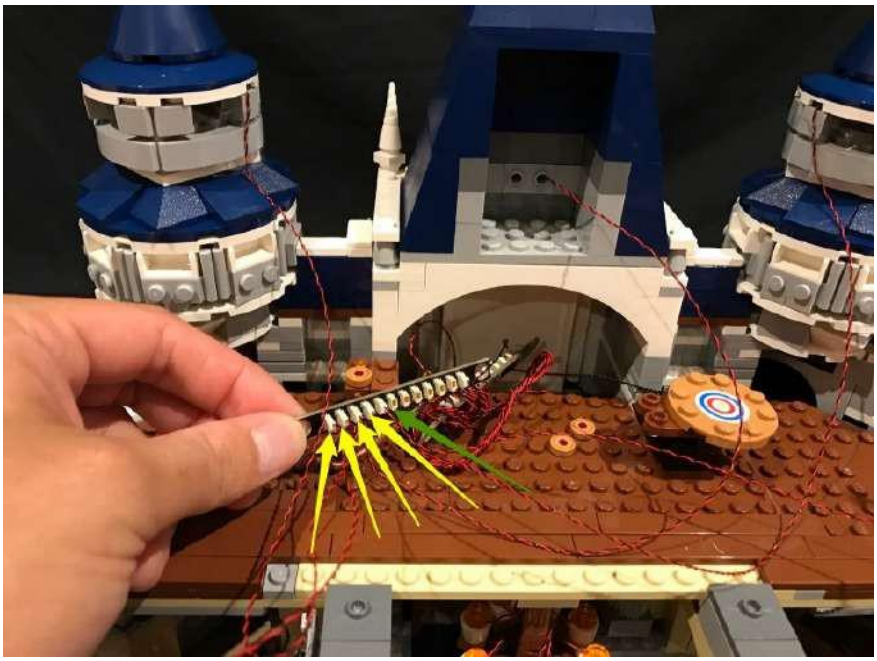
Reconnect the clock piece as well as other pieces we removed earlier.

Reconnect this whole section back to the castle and then reconnect the two sections on each side of the top.

28.) Take another 12-Port Expansion Board and connect a 5cm connecting cable to the first port. Connect the other end of the cable to the remaining port on the first expansion board.

Connect the Dot Light cables from the 4 towers as well as the clock light to the ports on the other side of the second expansion board.

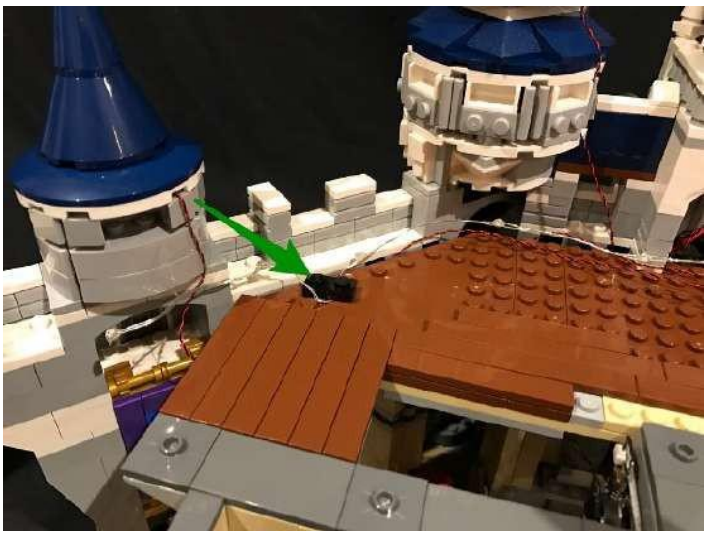


Neaten up cabling by laying them down in between the centre section and walls of the castle. Tuck the expansion boards into the middle section as per below.

Test the lights we have installed again by connecting the USB Power Cable to the expansion board. Turn on to verify all is OK

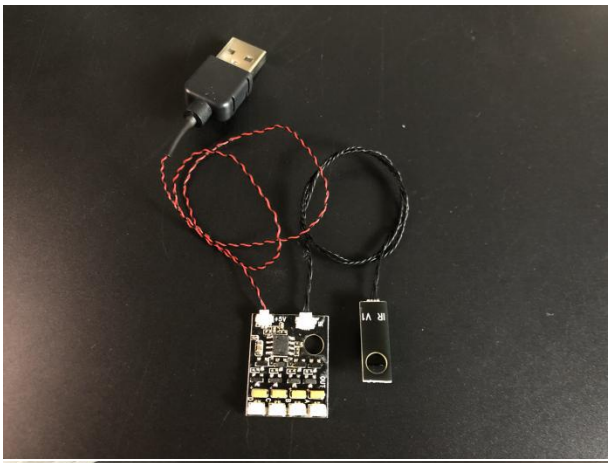
29.) Take the Multi-Colour Changing Light String and connect it to the next spare port on the far right of the 12-port expansion board.

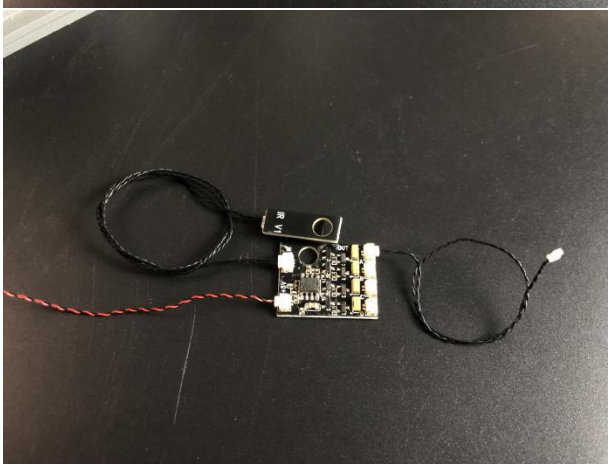
Lay the light string across the base of the second koor. Use 2x provided LEGO 1x2 plates to secure down at each side and do your best to ensure each of the 10 individual LEDs are facing up as we want them to shine as much as possible onto the front of the second level walls.



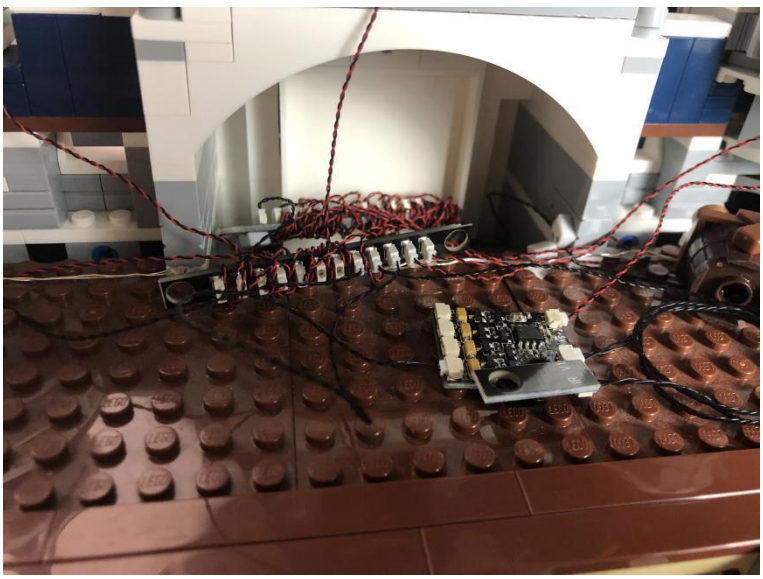
28.）Take the Remote Control Switch Board, connect the USB cable to it

Connect the 15cm connecting cable to the Remote Control Switch Board

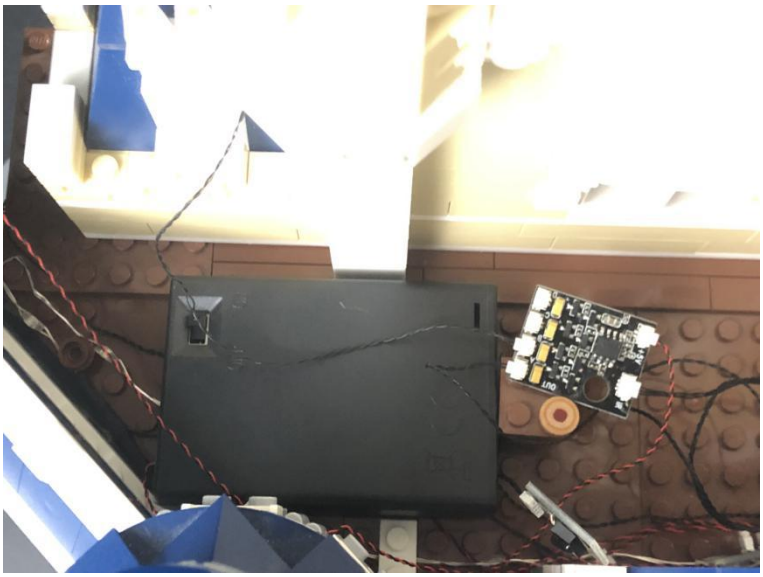




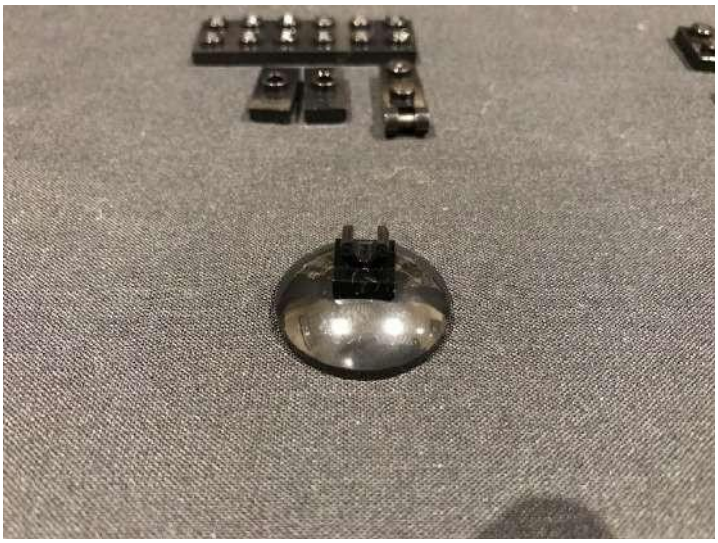
Connect the other end of the 15cm connecting cable to the 12-port expansion board



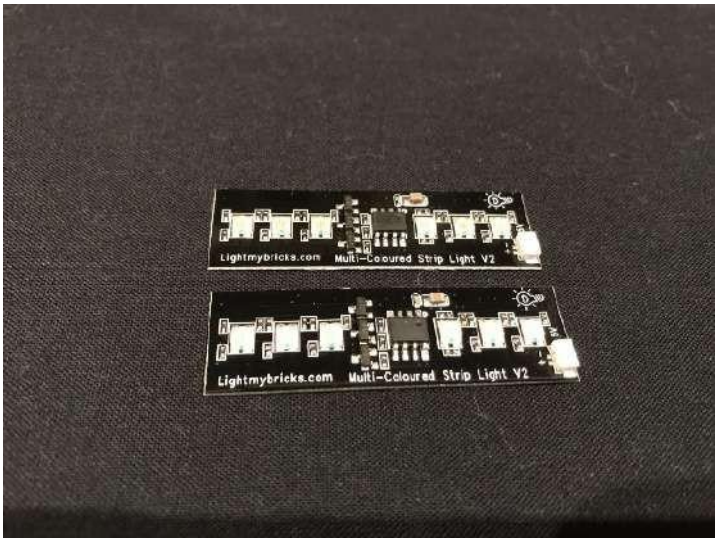
29.）take a 30cm connecting cable, connect it to the next port on the Remote Control Switch Board

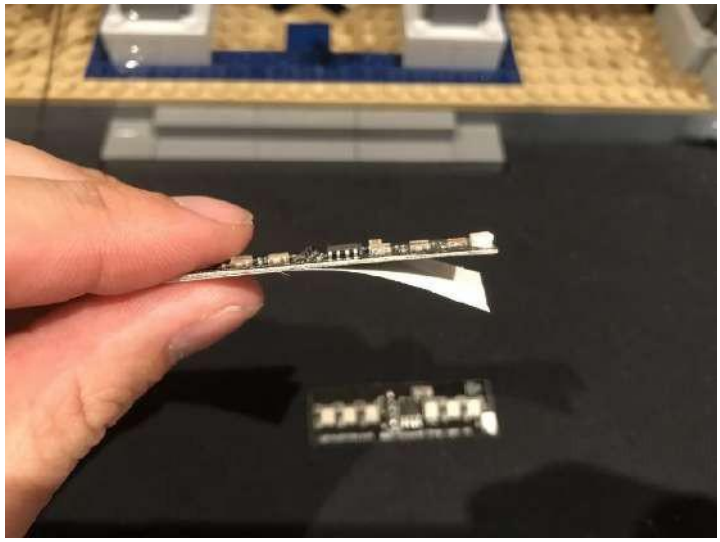


30.) take the following pieces, and assemble them as per below to make 2 spotlights



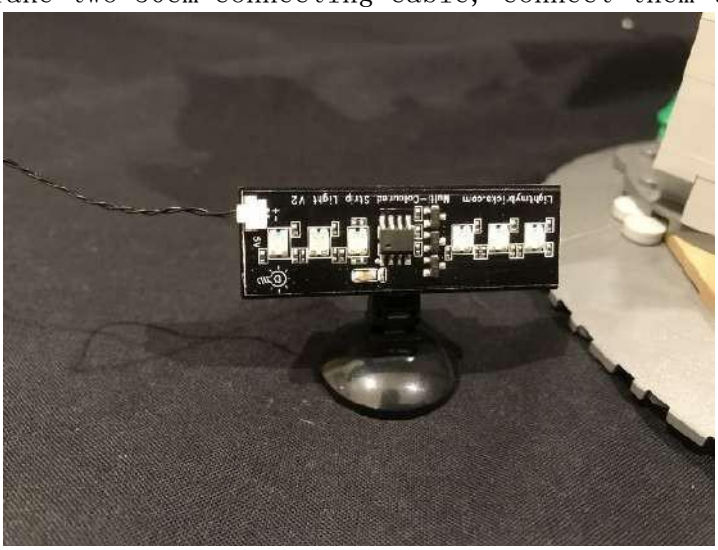
take 2 Multi Colour Strip Lights, stick them to the back of the following 2x6 plates

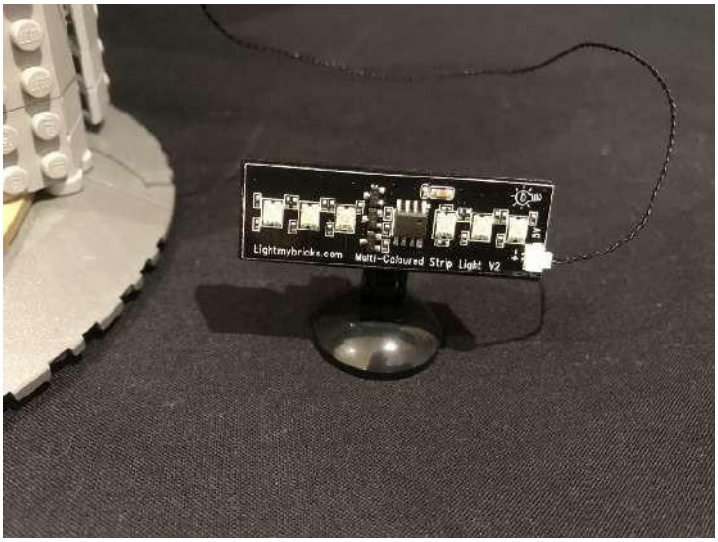




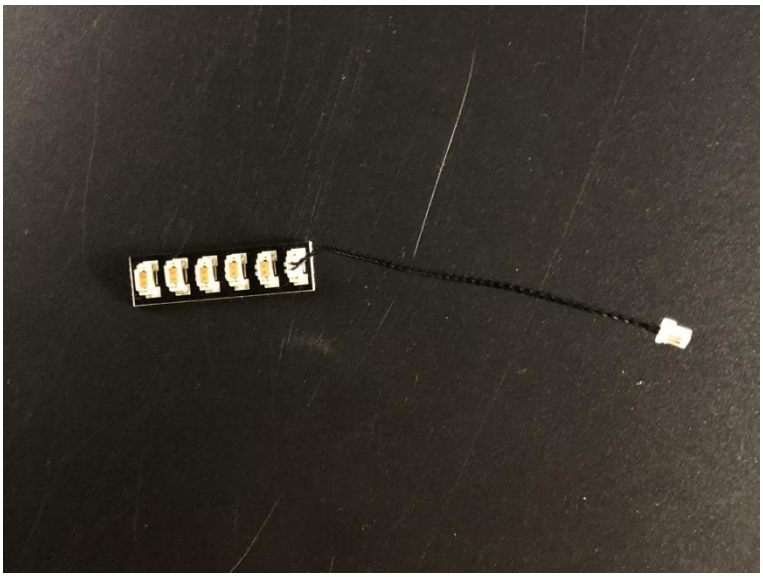
secure one Multi Colour Strip Lights to a spotlight, secure the other to the left spotlight

Take two 50cm connecting cable, connect them to the spotlights as per below

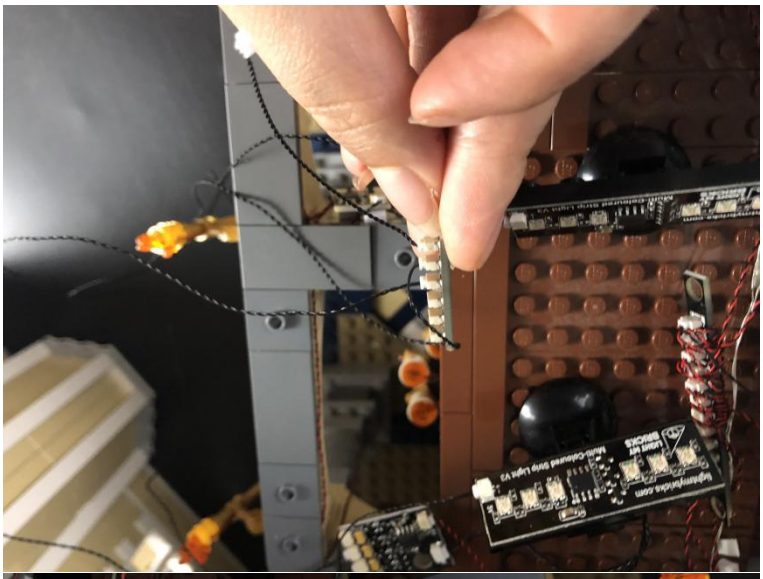


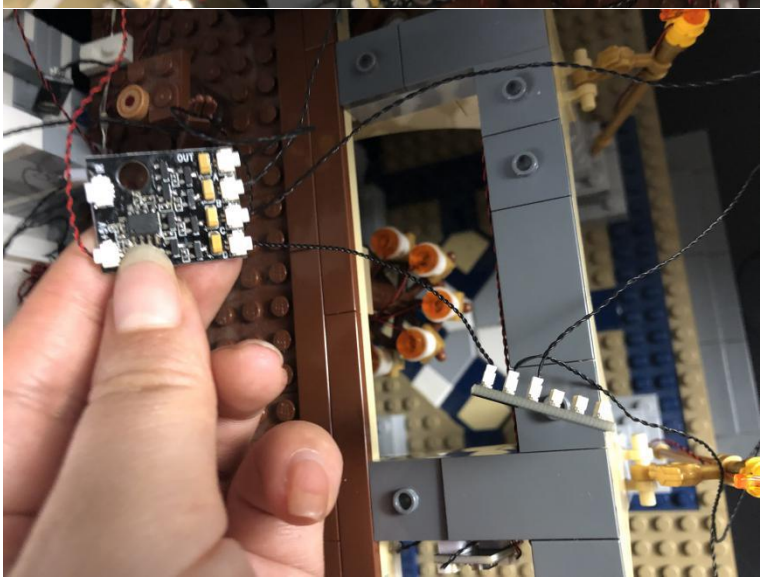


take a 5cm connecting cable, a 6-port expansion board
connect the 5cm connecting cable to the expansion board

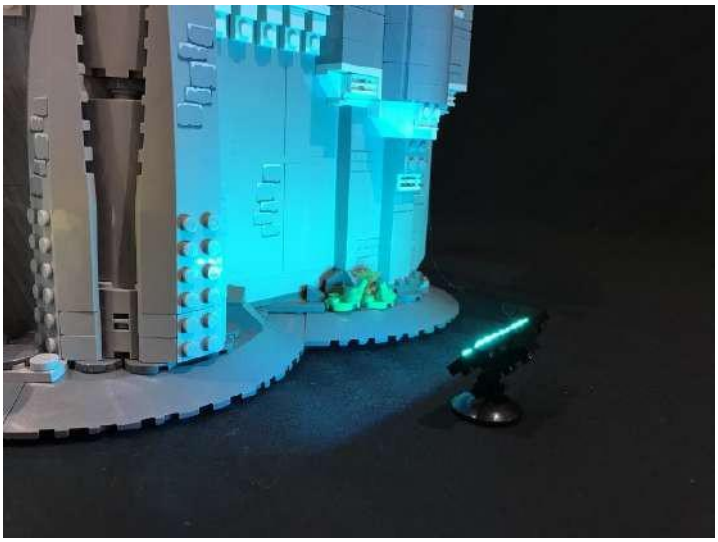


Connect the two 50cm connecting cables to the 6-port expansion board, connect the 5cm connecting cable from the expansion board to the Remote Control Switch Board





Place the spotlights at both sides of the castle, adjust the angle to make sure they can light the wall.

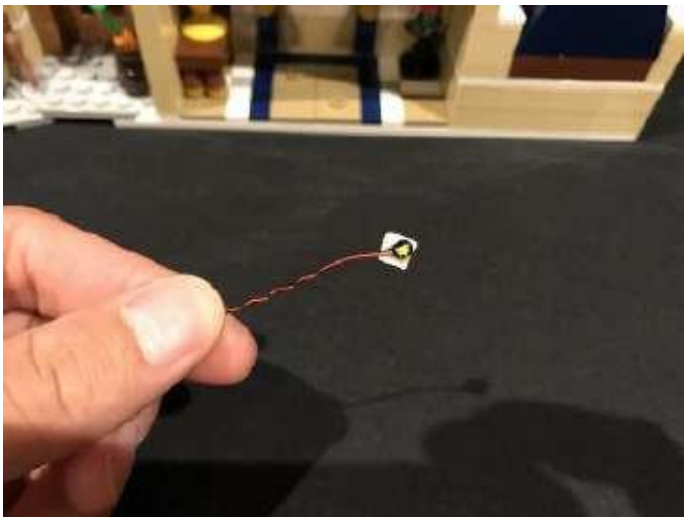


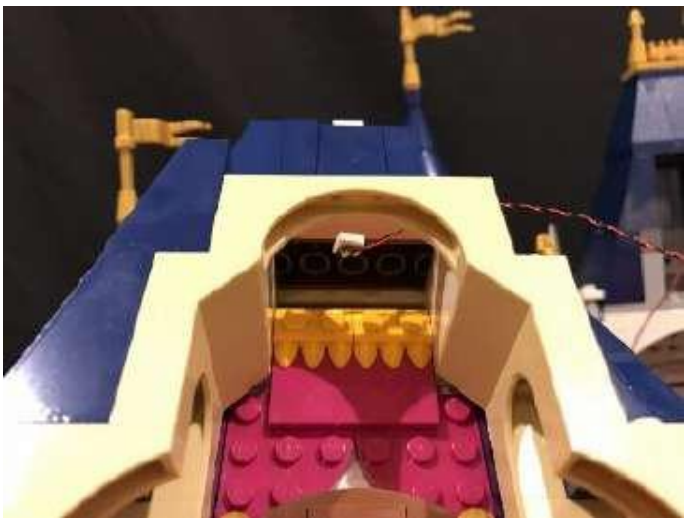
Press the buttons of the Remote Control Switch Board to change the colours of the lights

31.)move onto lighting the next part of the castle. Turn the building to its back, remove the middle piece from the roof, remove the following blue bricks

32.) take the middle part of the roof, stick a white 30cm dot light under it by using the adhesive square. Reconnect this part, thread the cable through the inside of the building, reconnect the following pieces back to the

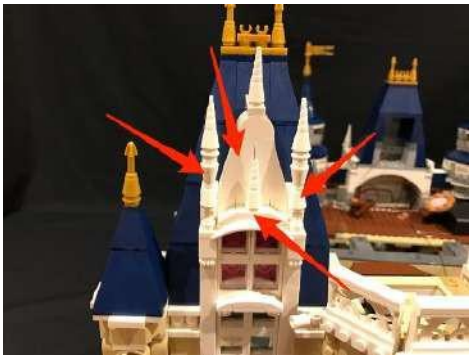
roof

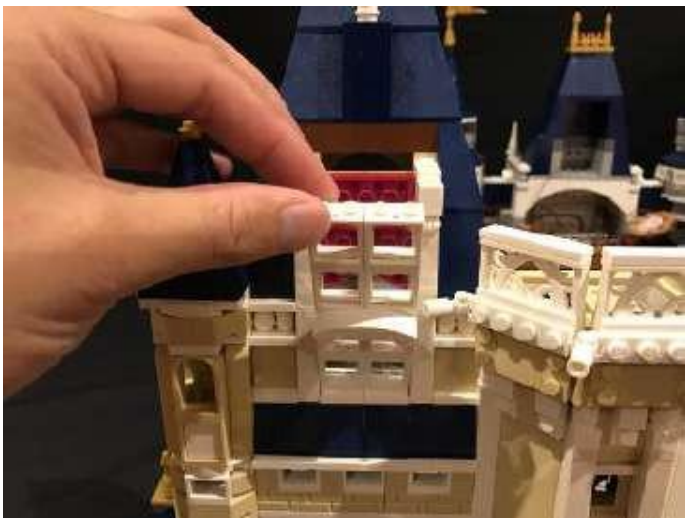




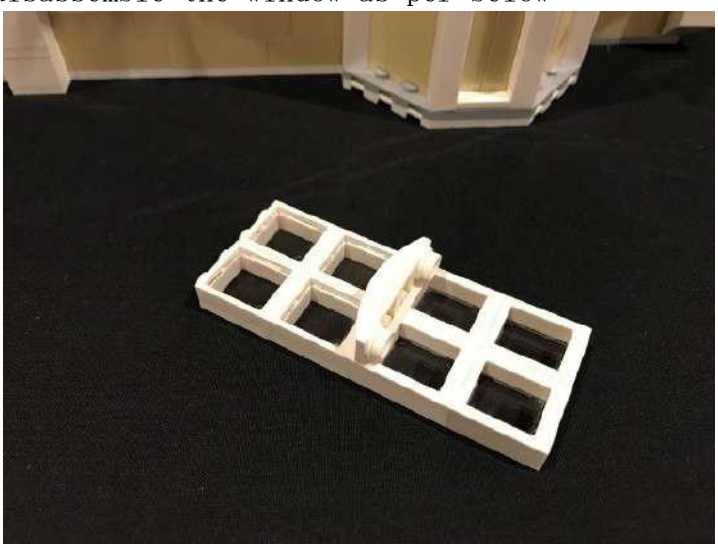
33.) remove the following pieces

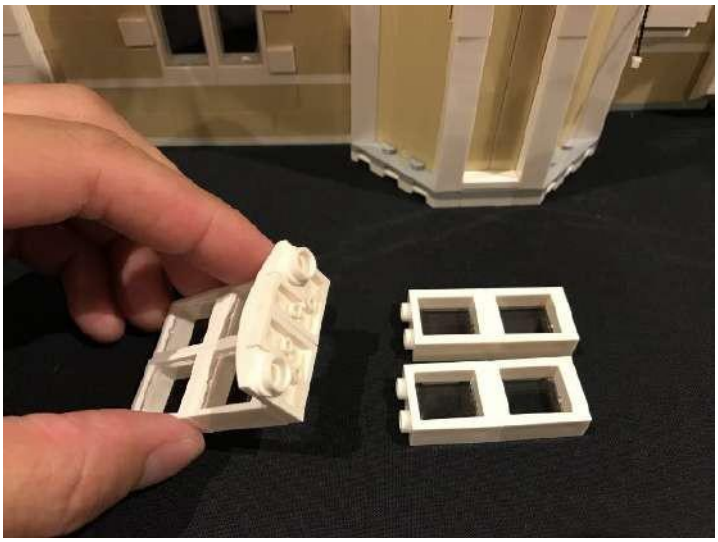
34.) remove the window and the pieces around it as per below



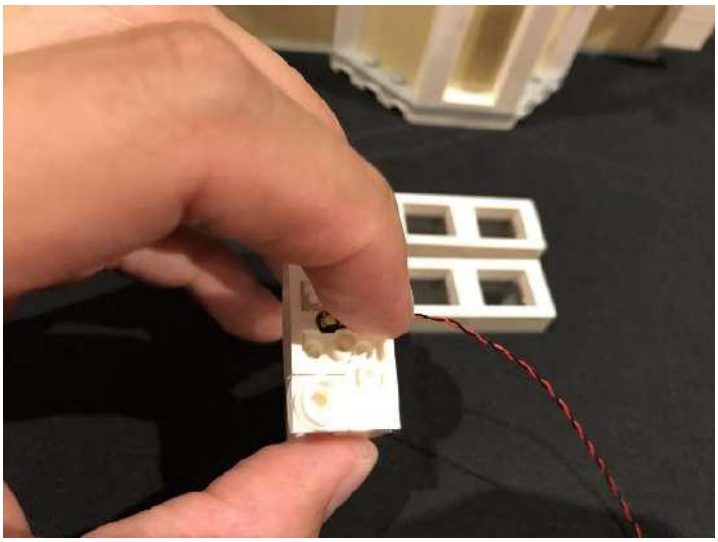


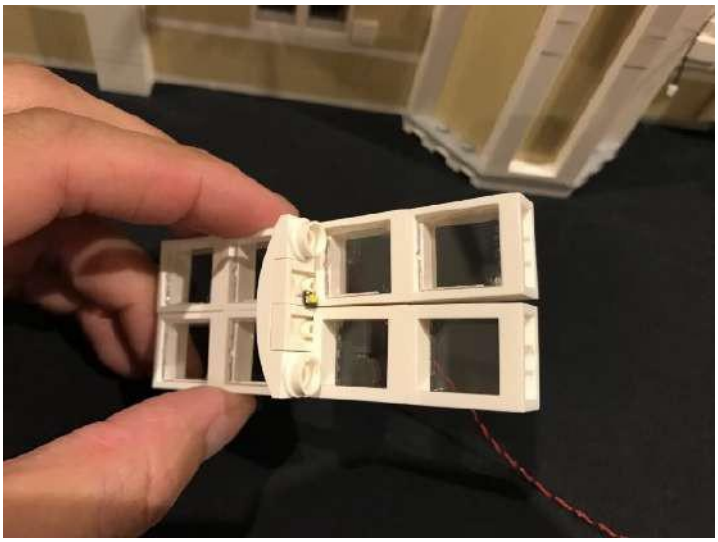
disassemble the window as per below





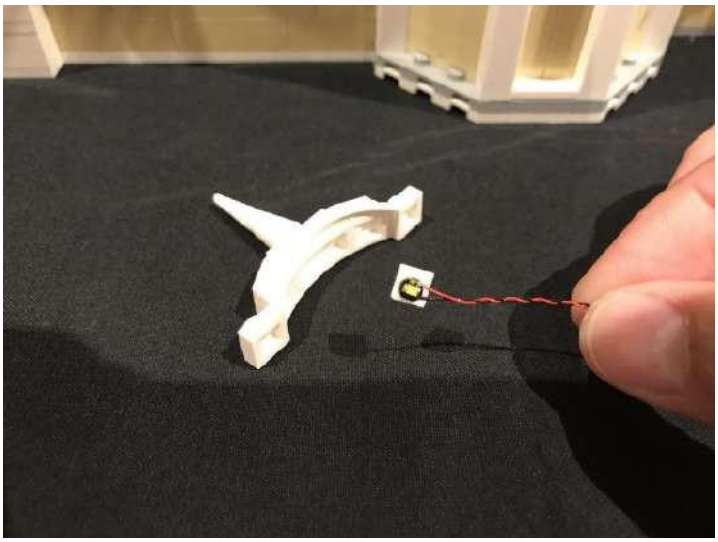
35.) take a white 15cm dot light, with LED component facing down, connect it to the upper half of the window. Reconnect the other pieces of the window

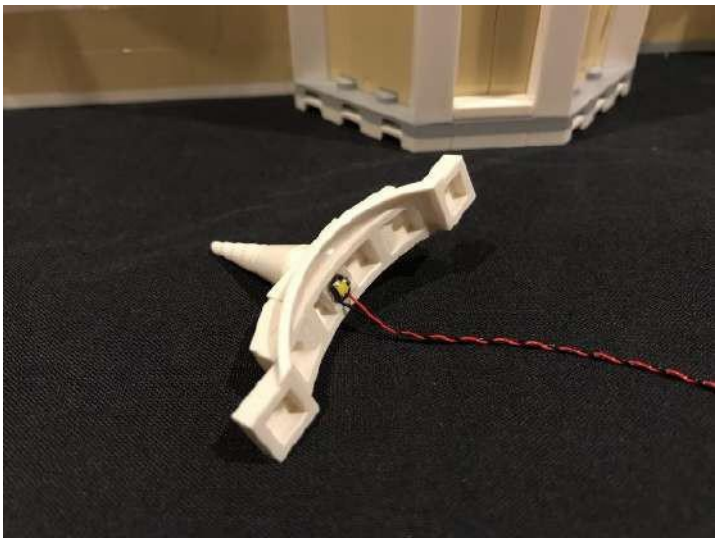




Thread the cable through the inside of the room before reconnecting the window

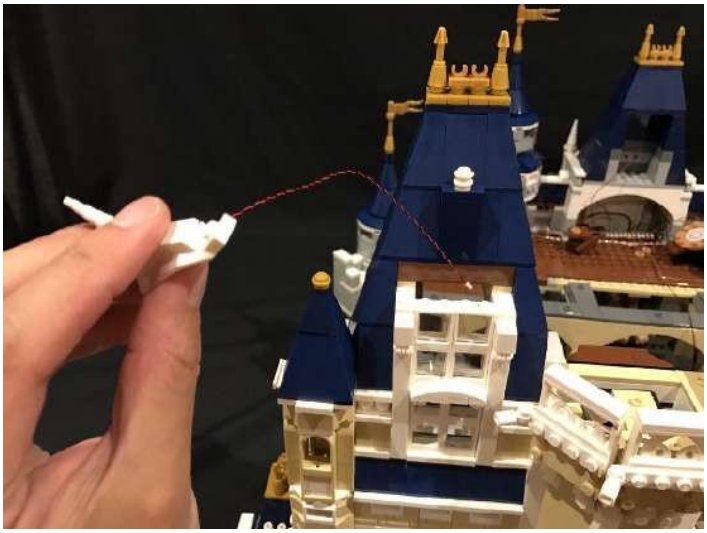
36.) connect another white 15cm dot light to the top part of the window before reconnecting it





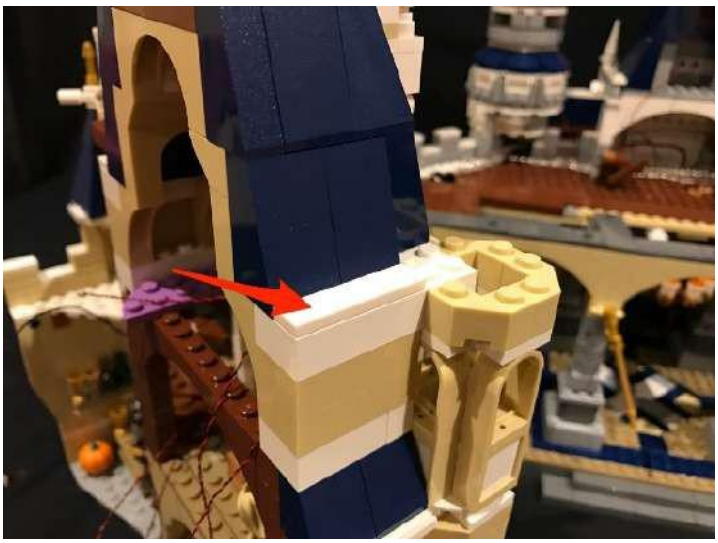
Thread the cable through the room before reconnecting the top part.

Then, reconnect the other pieces we removed



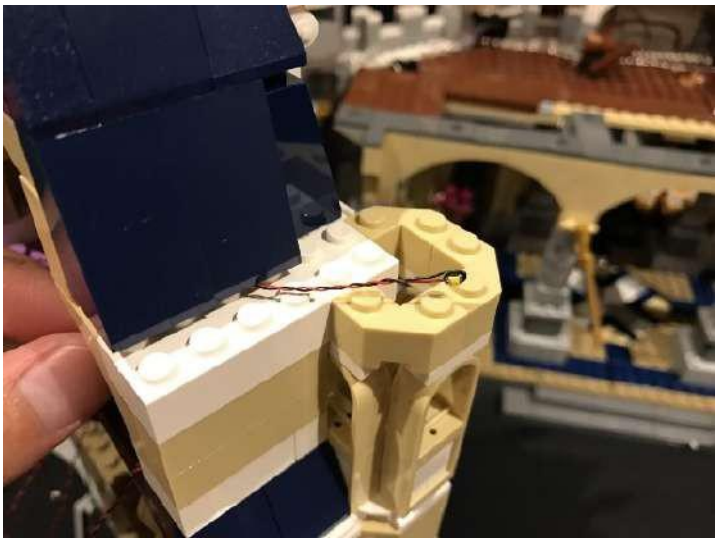
Connect the curtain over the cables as per below

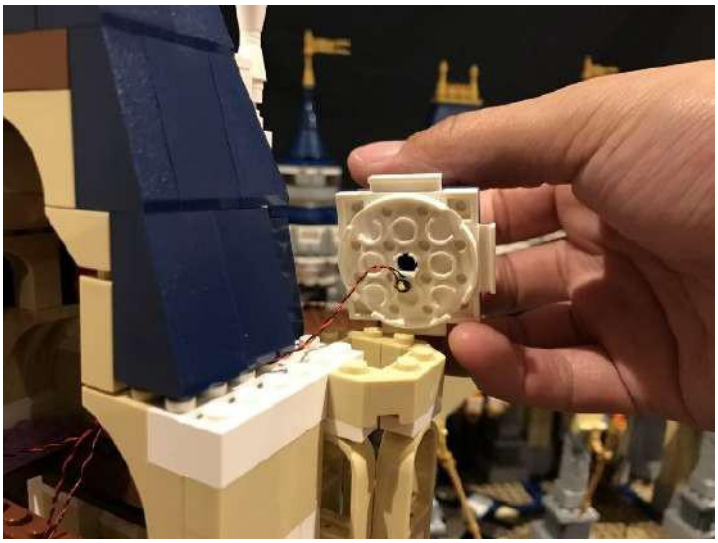
37.) we’ll now install the lights to the tower near the bedroom. Remove the roof and the following white bricks



lift the following section to create a gap

take a white 15cm dot light, thread its connector down through to the bottom of the tower. Stick the LED component to the top as per below, reconnect the roof



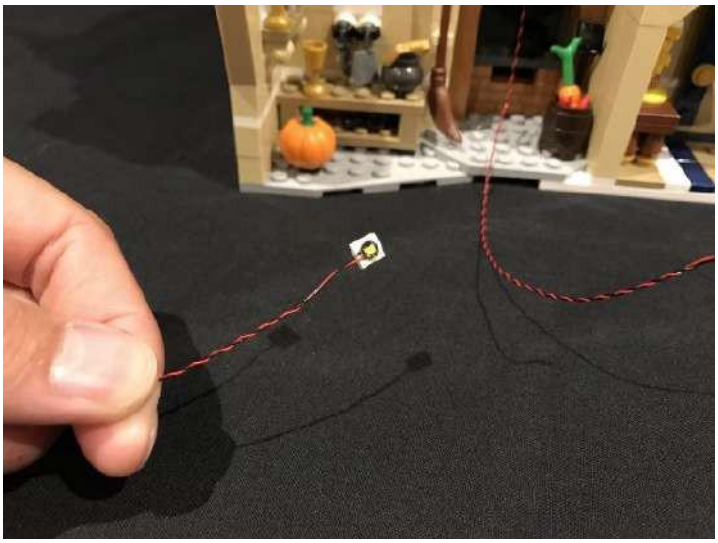
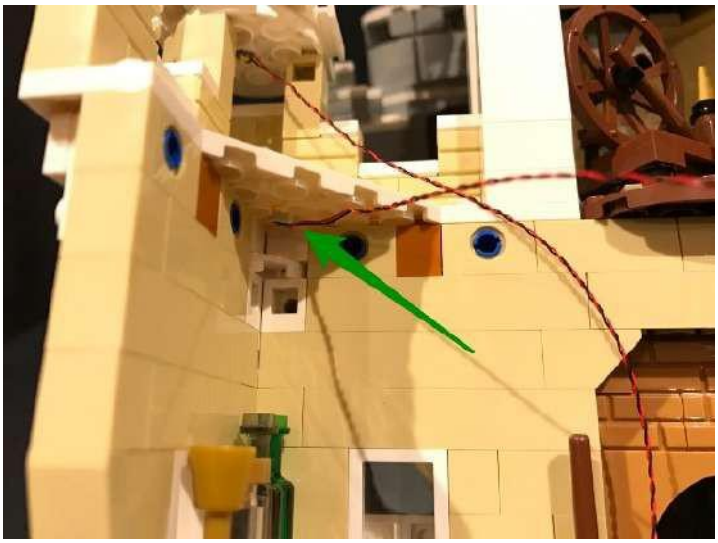


reconnect the white bricks

38.) thread all 4 cables down through the space underneath, reconnect the 2 purple plates. Place the cables neatly

39.) continue to install light for the tower at the left side. Remove the top of the tower, secure a white 30cm dot light to the center of the white round plate by connecting a 1x2 plate over. With lighting part facing down, pull the cable rightward, reconnect the roof

40.) take another white 30cm dot light, stick it to the corner of the roof as per below

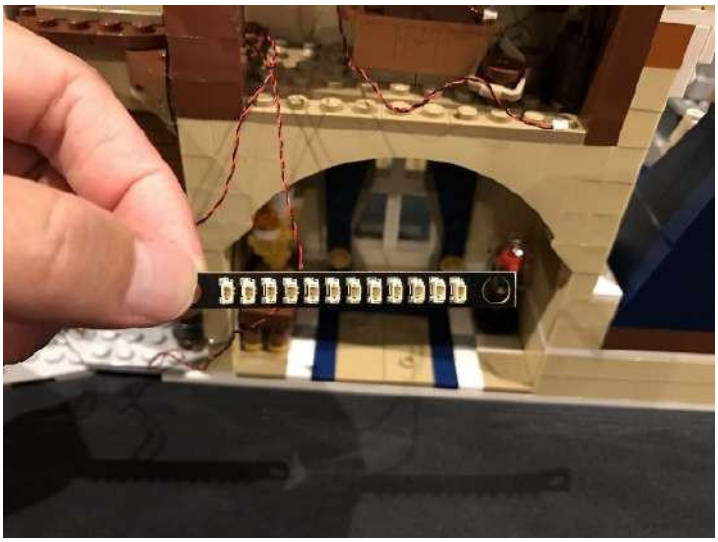
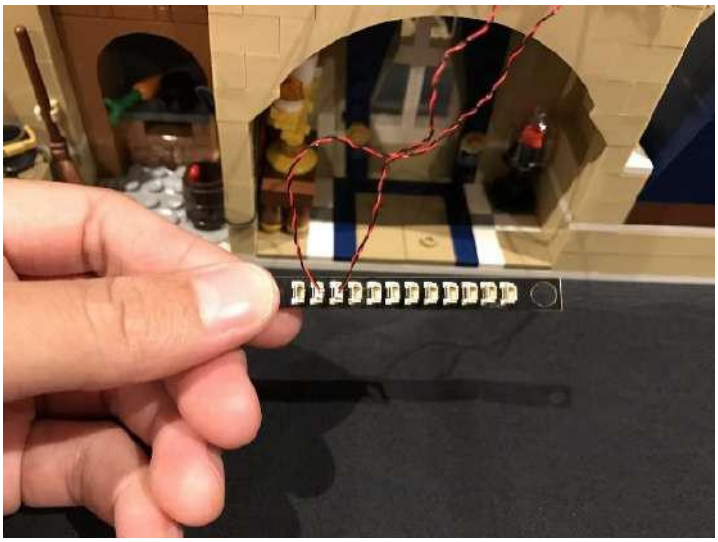



take the 2 following connecting cables, thread them pull them toward the right

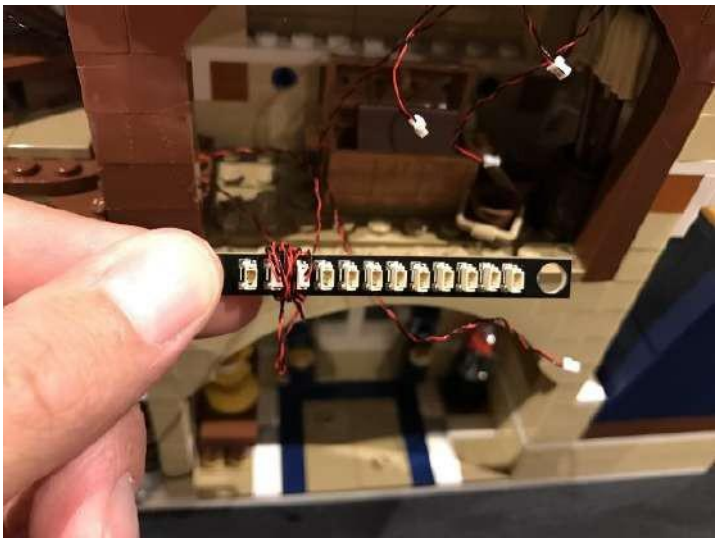
remove the following pieces

Place the 2 cables in between studs as per below, reconnect the brown plates to secure the cables in place, reconnect the other pieces

41.) take another 12-port expansion board, connect the following cables to it

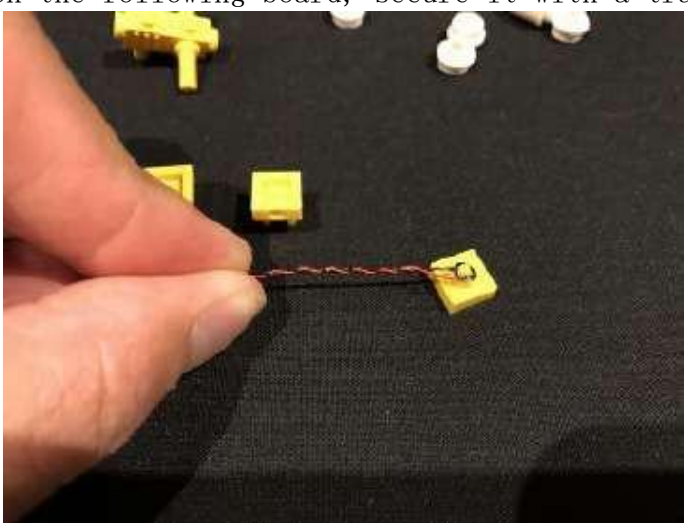
wind excess cables around the expansion board, connect the 30cm connecting cable over the bed to the next port, connect the 15cm connecting cables from the window and the tower at the right side to the expansion board

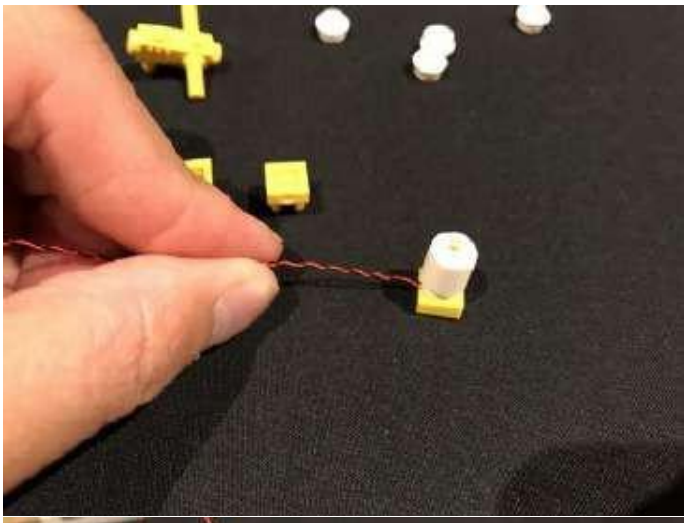


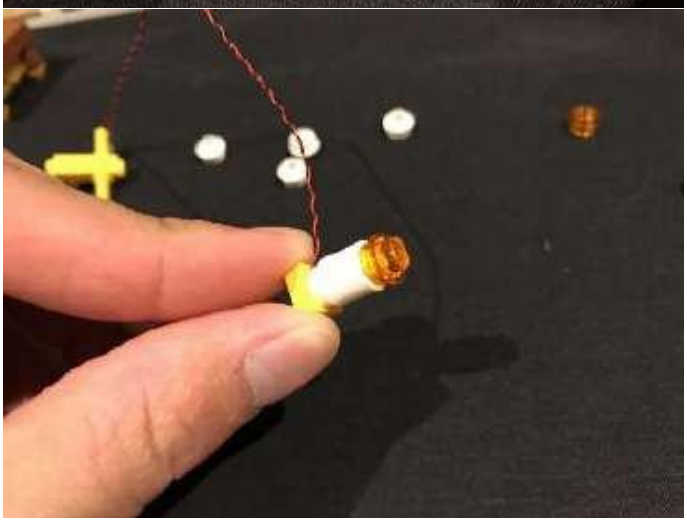
leave the expansion board and the cables 暂时将插座和线放在一边，然后进入下一步。

42.) then, we'll install lights for the candle. Remove the candle with the table, disassemble the candle as per below

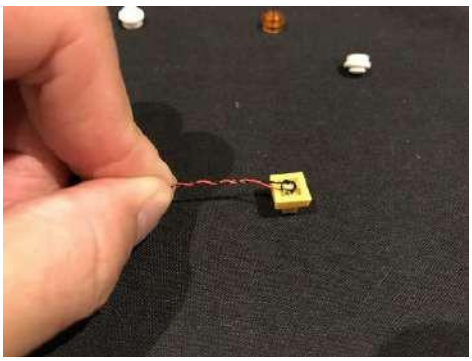
take a white 15cm dot light, with LED component facing up, place the light to the stud on the following board, secure it with a trans orange round plate

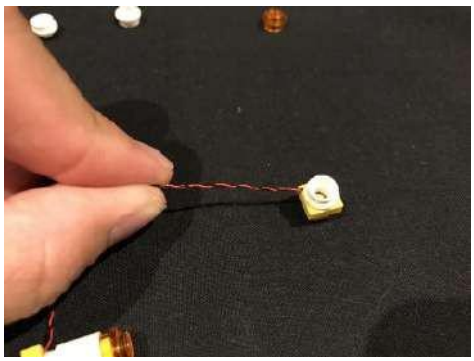


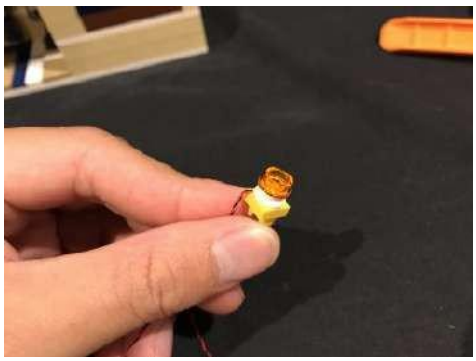




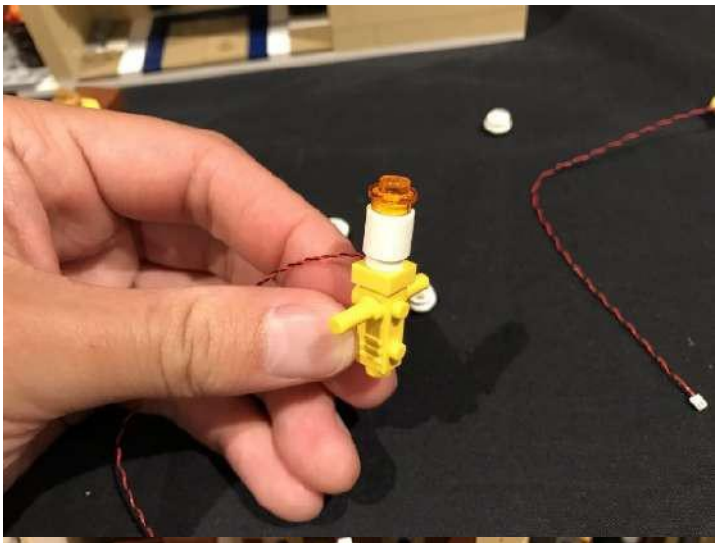
Take a 15cm white dot light, place it inside the yellow board with a clip. Connect a white round plate with hole over, connect another tans orange round plate over. Repeat the steps above to install a white 15cm dot light to another yellow plate



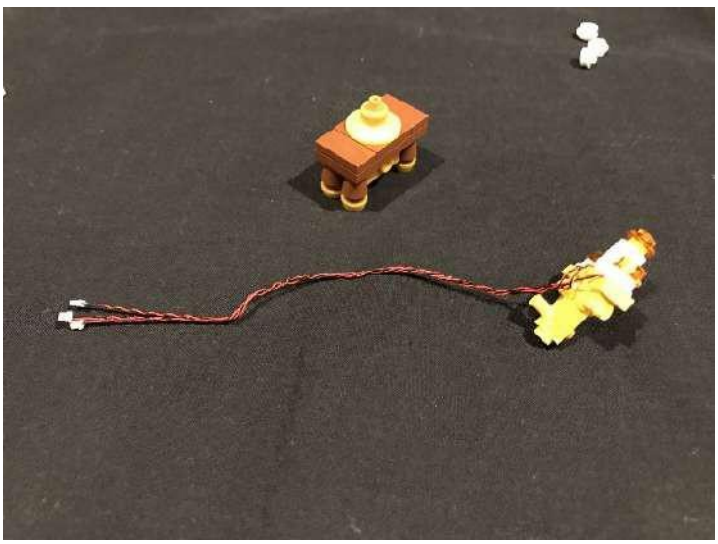




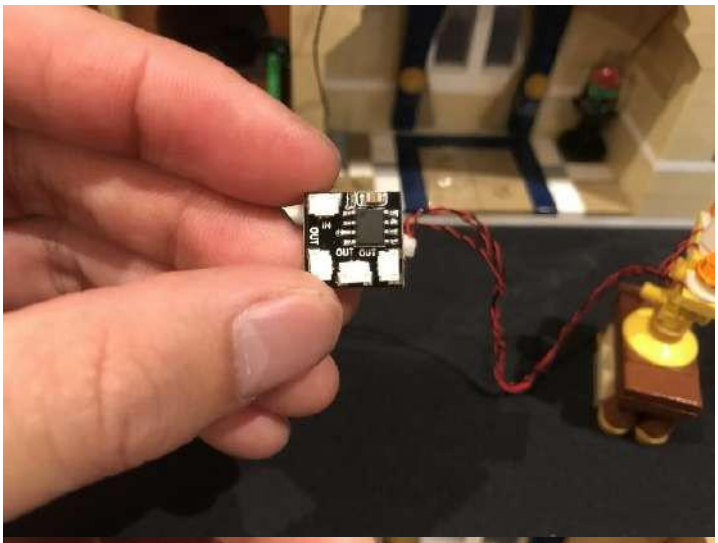
reconnect the candle, place the cables toward the back

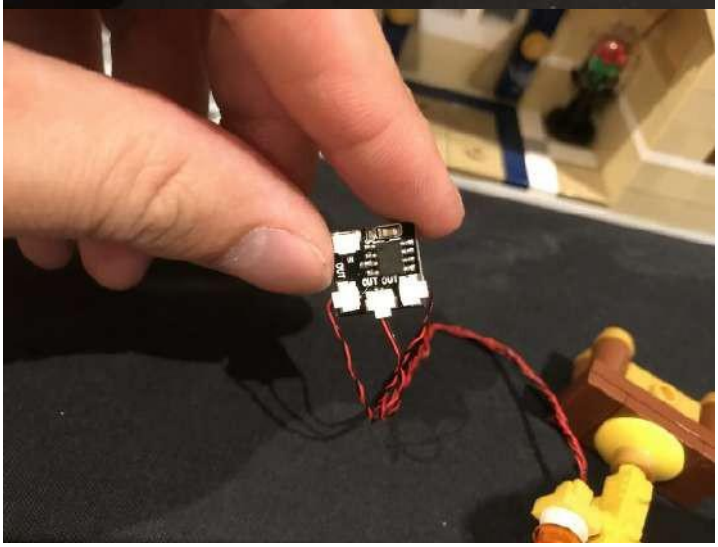


Group the 3 cables together, reconnect the candle back to the table

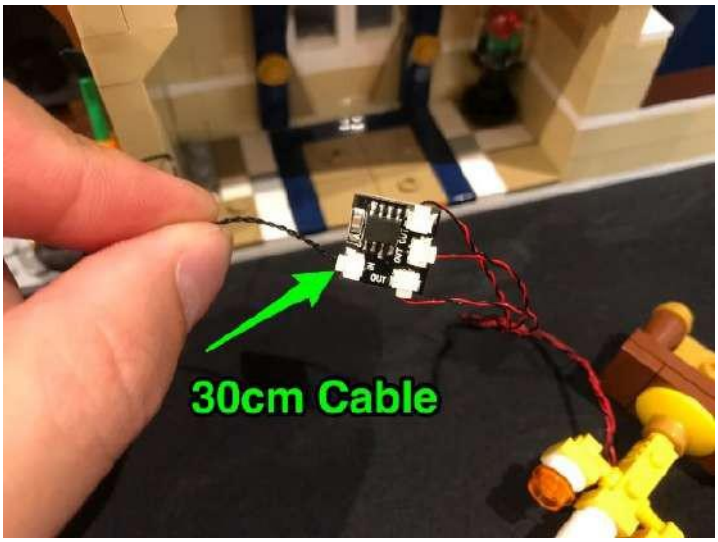


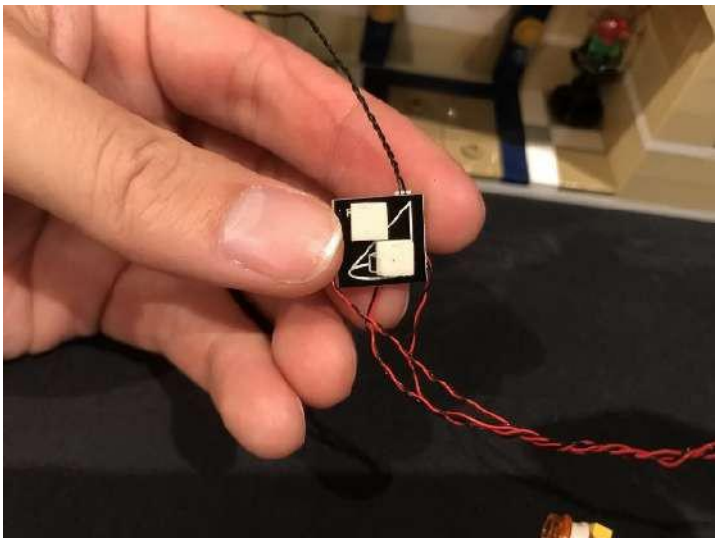
43.) connect the cables to the output ports Flicker Effects Board





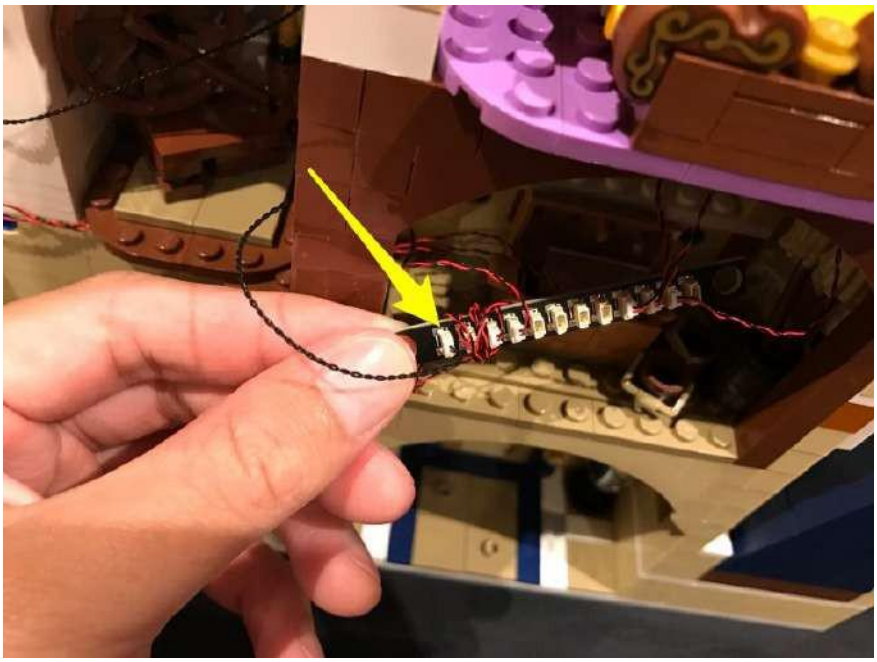
44.) take a 30cm connecting cable, connect it to a input port on the Flicker Effects Board, stick 2 adhesive squares to the back of the Flicker Effects Boards



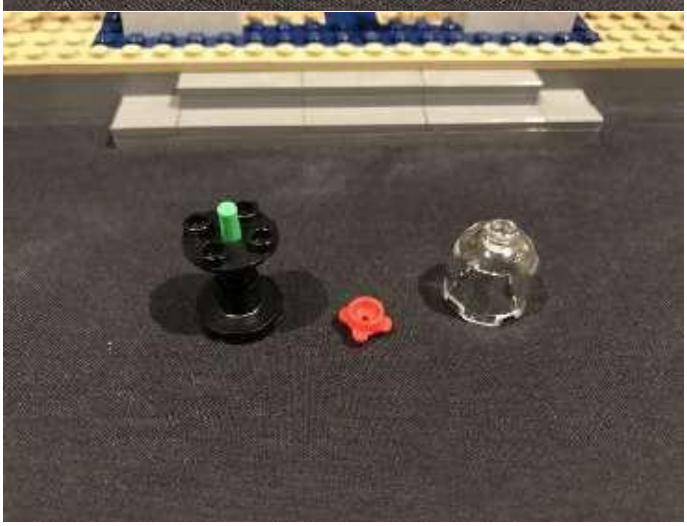


45.) stick the Flicker Effects Board to the following place, tuck excess cables, reconnect the table

46.)connect the other end of the 30cm connecting cable to the far left port on the 12-port expansion board at the room above

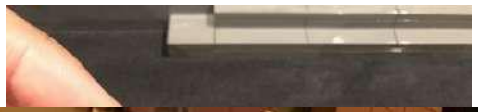


47.) continue to install light for the flower, remove the following piece. Disconnect the trans piece and the red piece



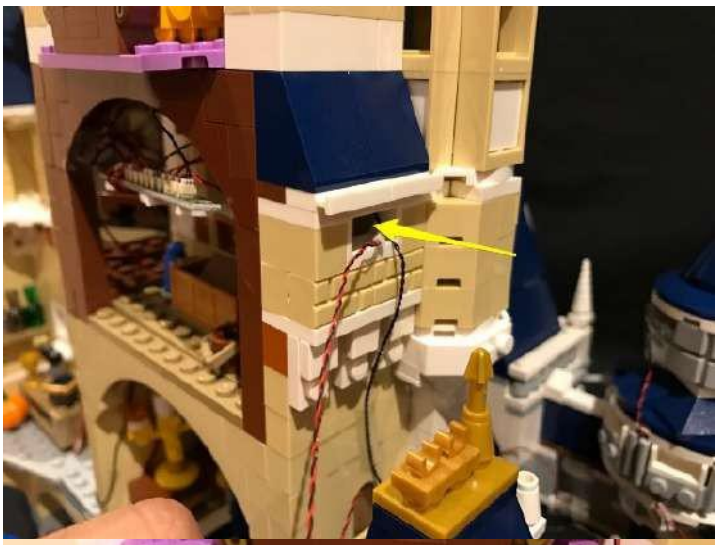
Take the following green flower piece, connect it to the following place

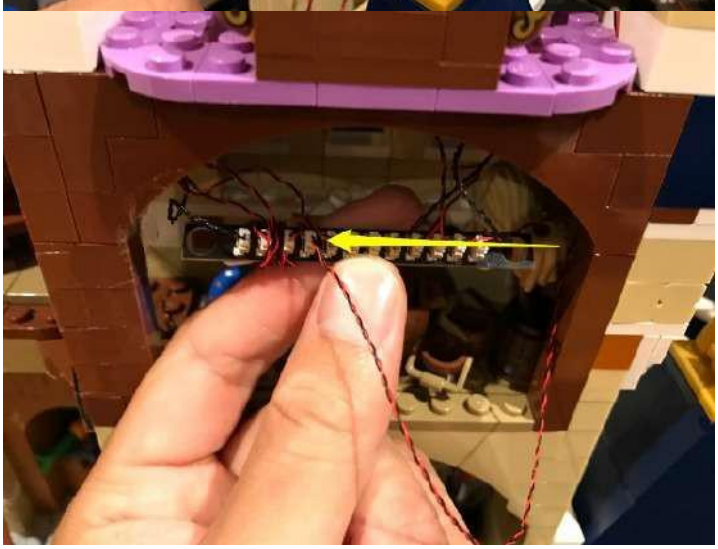
take a white 30cm dot light, with LED component facing up, connect it to the middle of the green flower, reconnect the red flower over it, reconnect the trans piece



thread the cable through the window before reconnect the table

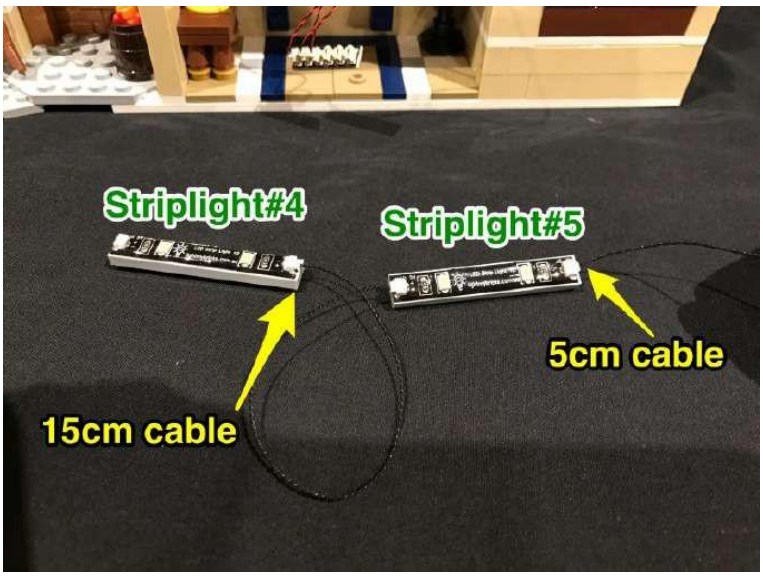
pull the cable up, thread it through the window, connect it to the 12-port expansion board





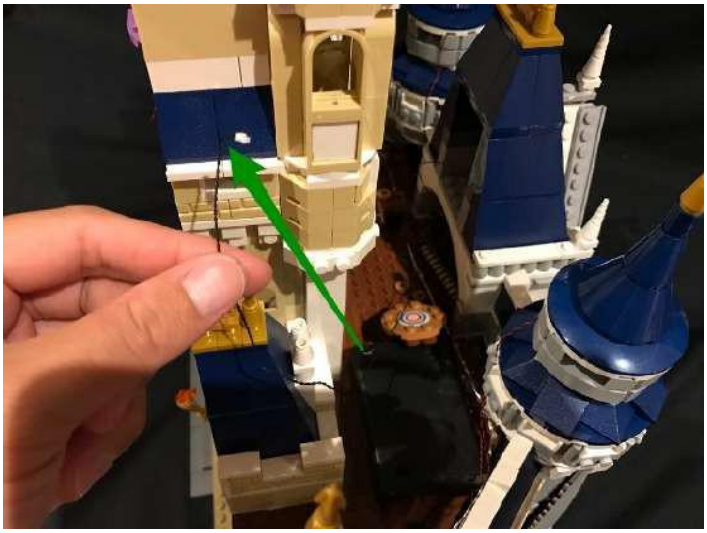
48.) take 2 strip lights, a 15cm connecting cable, a 5cm connecting cable. Connect the 2 strip lights(stiplight#4 and striplight#5) together by using the 15cm connecting cable. Separately stick the 2 strip lights to two 1x6 plate, connect

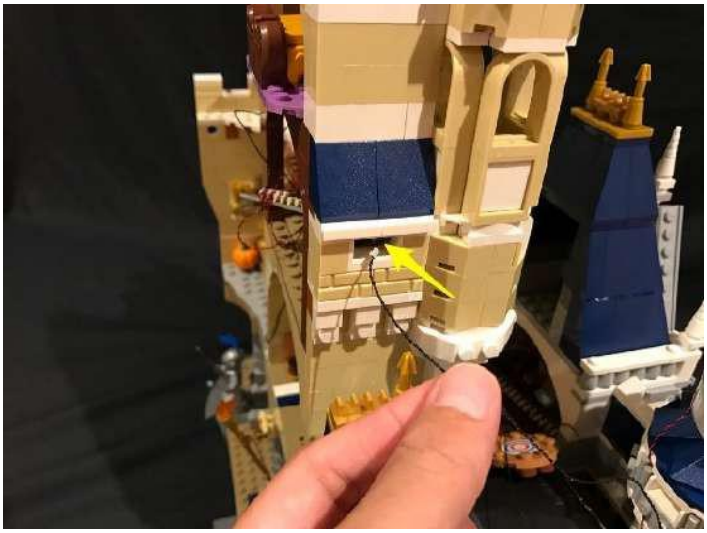
the 5cm connecting cable to the right port of the striplight#5

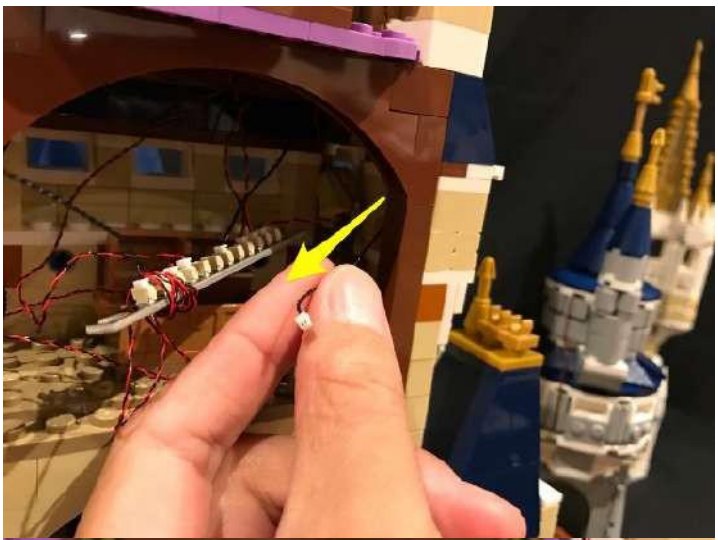


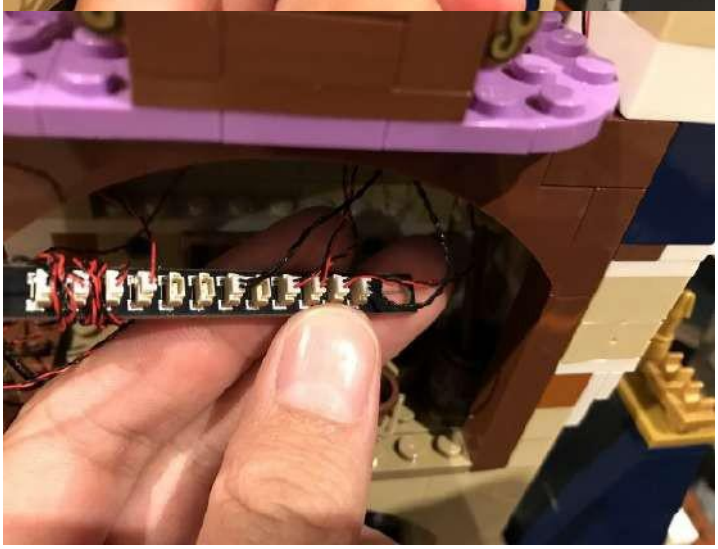
Connect the 5cm connecting cable from the striplight#5 to the 12-port expansion board. Connect the strip light to the following place

49.) take the middle section of the castle, connect it to the bottom section as per below. Connect the other end of the 30cm connecting cable from the Remote Control Switch Board to the 12 port expansion board









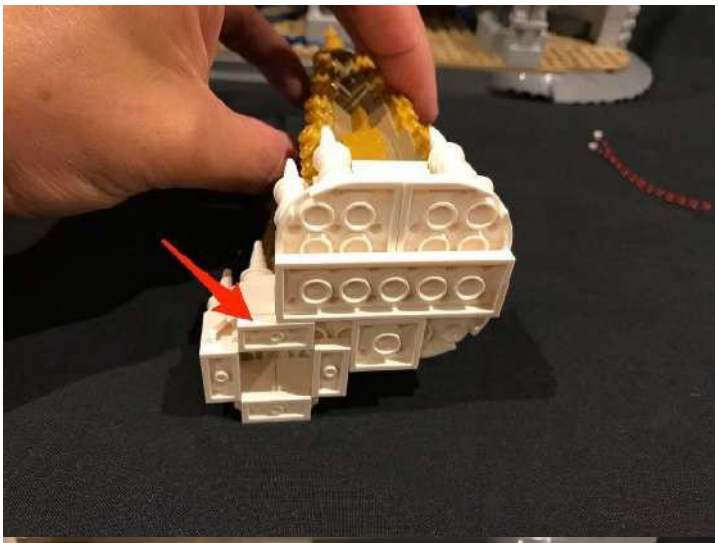
This completes installation for the middle section of the castle, turn the power on to verify the current

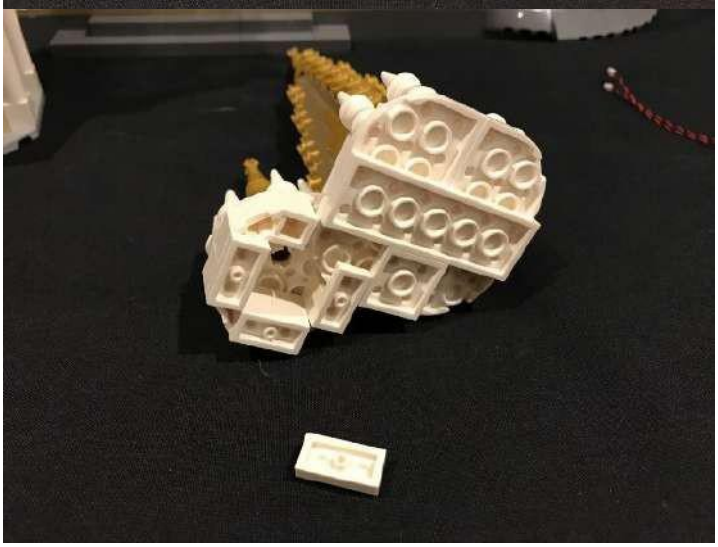
50.) take 2 adhesive squares, stick them to the back of the 12-port expansion board, stick the expansion board to the following place

tuck excess cables inside the room

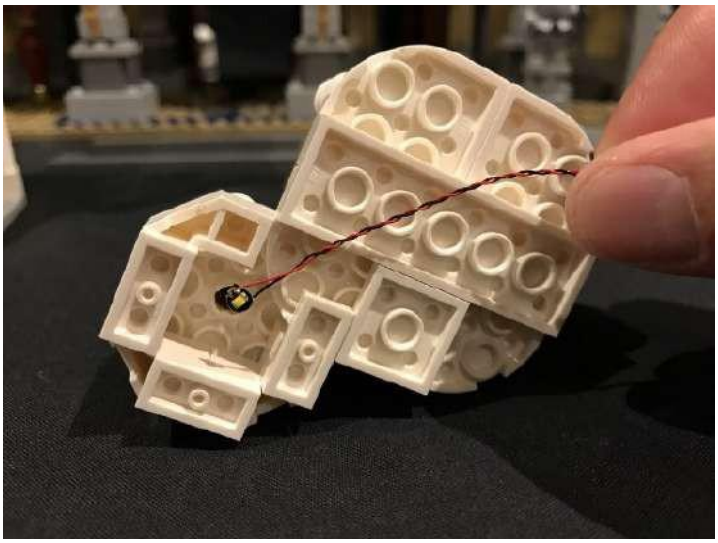
51.) move onto installing lights for the castle. Remove the roof and the mirror

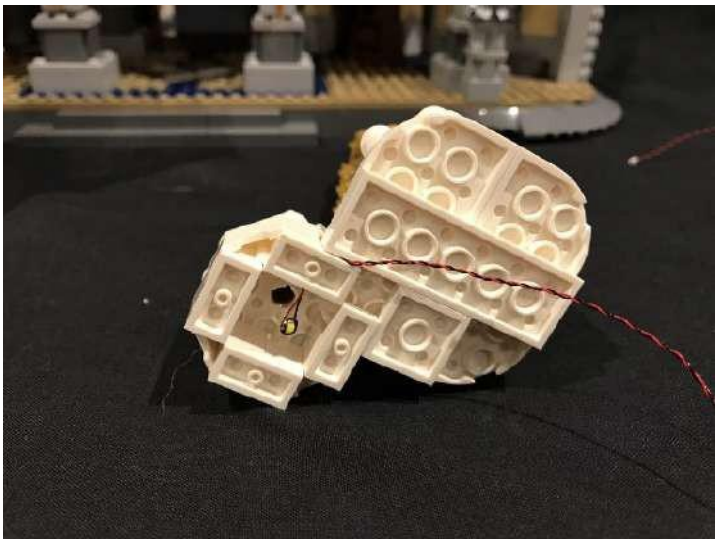
remove the roof, disconnect the following 1x2 plate 取下房顶，然后从下面断开下图的1x2板。



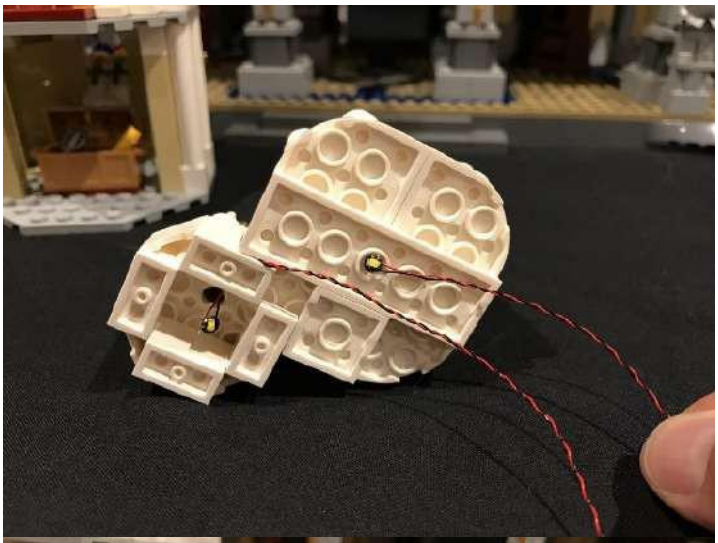


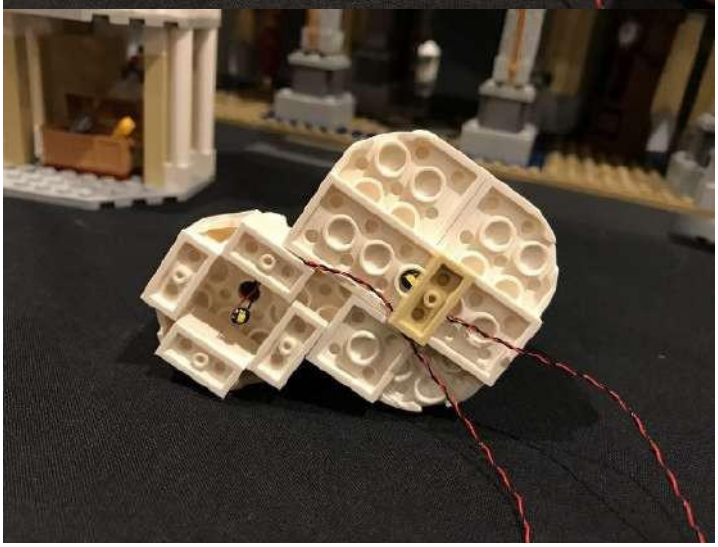
Take a white 30cm dot light, with lighting part facing down, place it to the middle of the roof, reconnect the 1x2 plate to secure the light

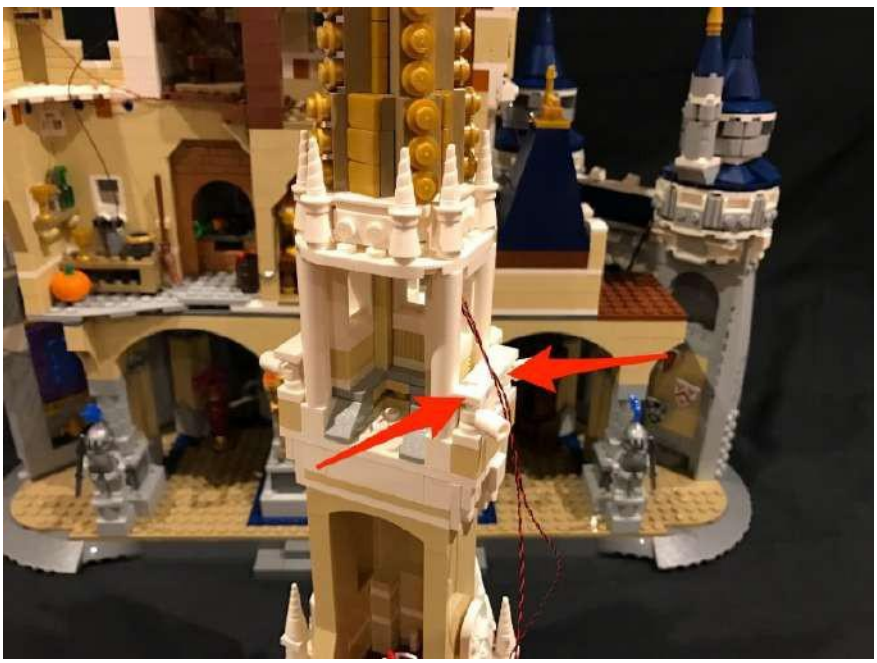




take a white 30cm dot light, connect it to the following place, with lighting part facing down, secure it in place with a 1x2 plate

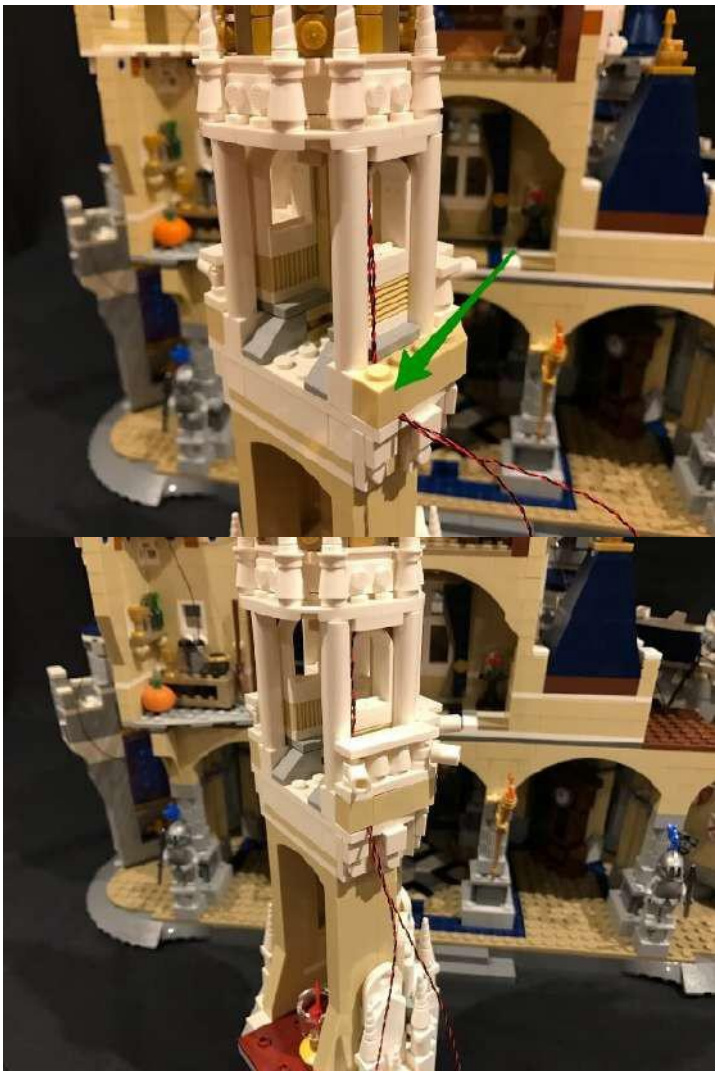




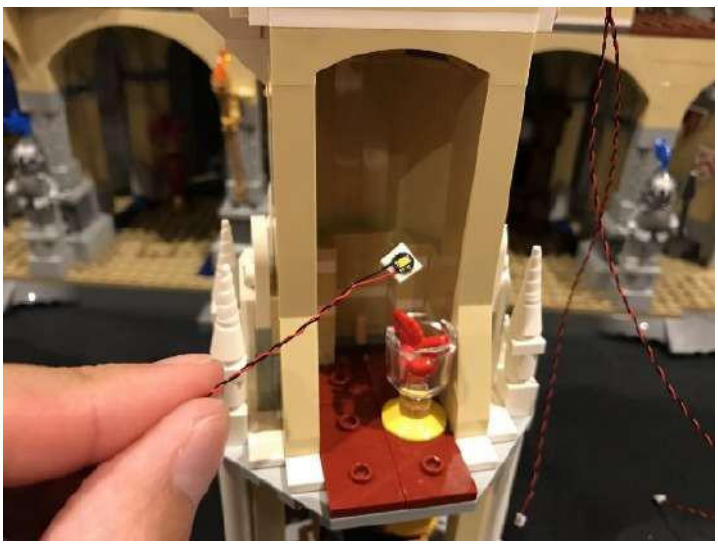


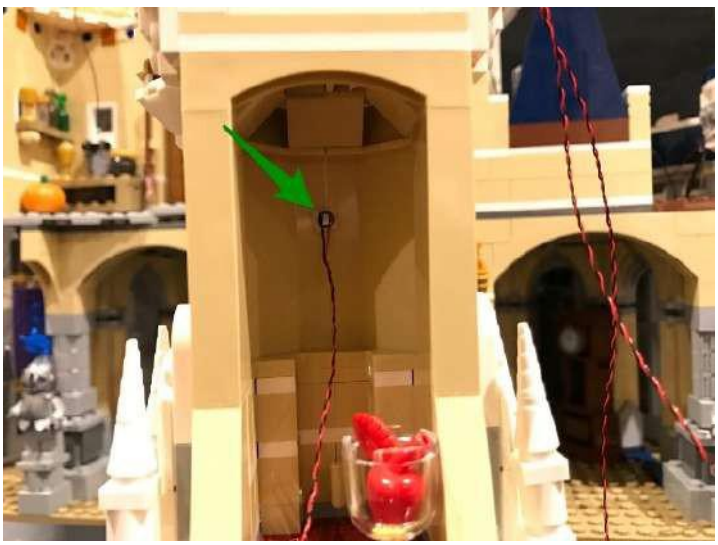
Reconnect the roof, remove the following pieces

Remove the following 1x1 brick, place the 2 cables underneath, reconnect the brick

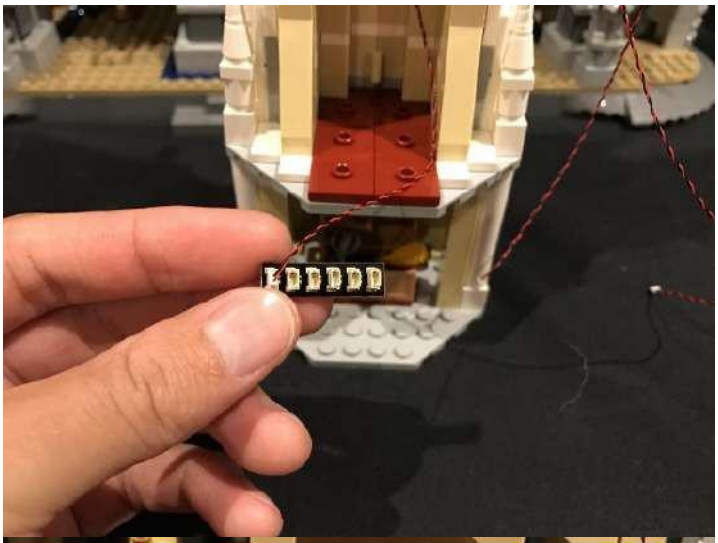


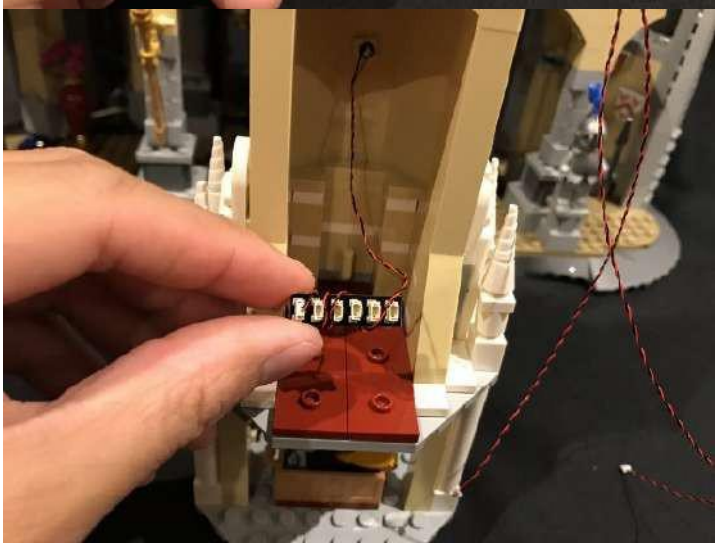
57.) take a white 15cm dot light, stick an adhesive square to it, stick it to the wall as per below



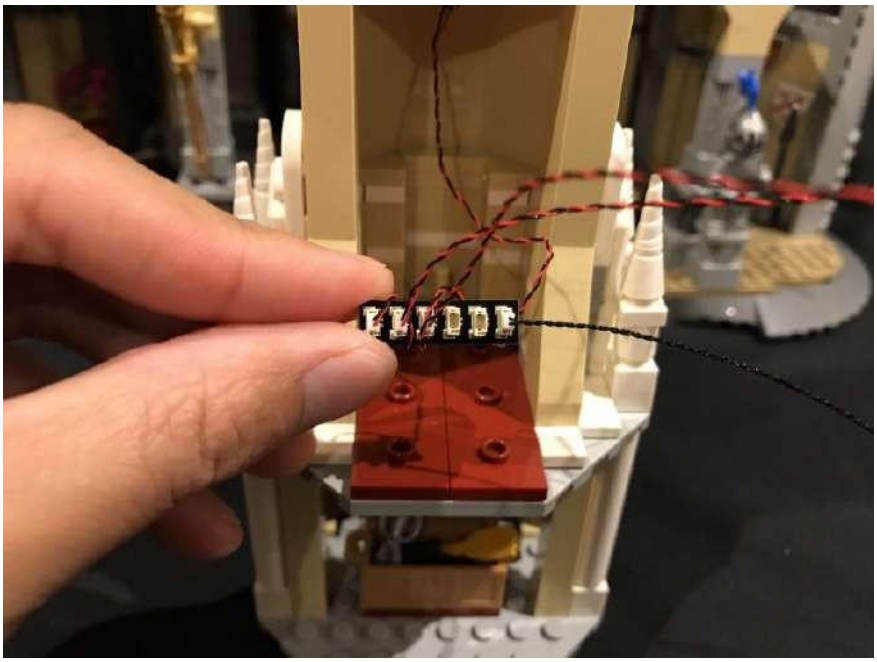


take a 6-port expansion board, connect the cables to it. Wind excess cables around it

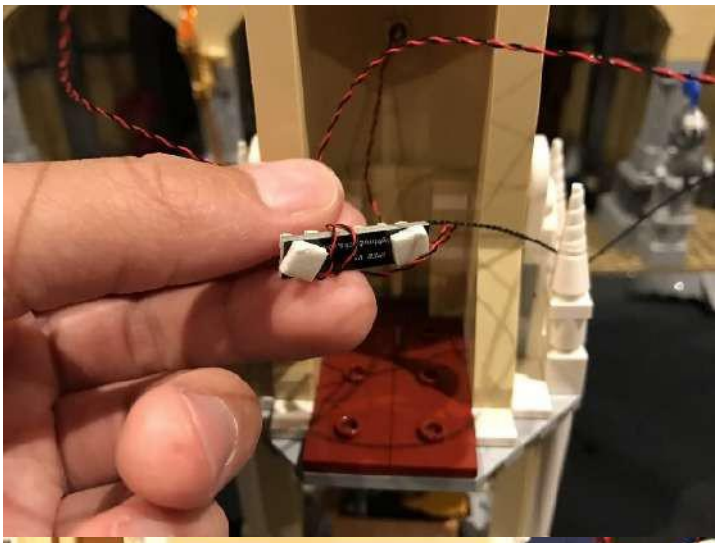


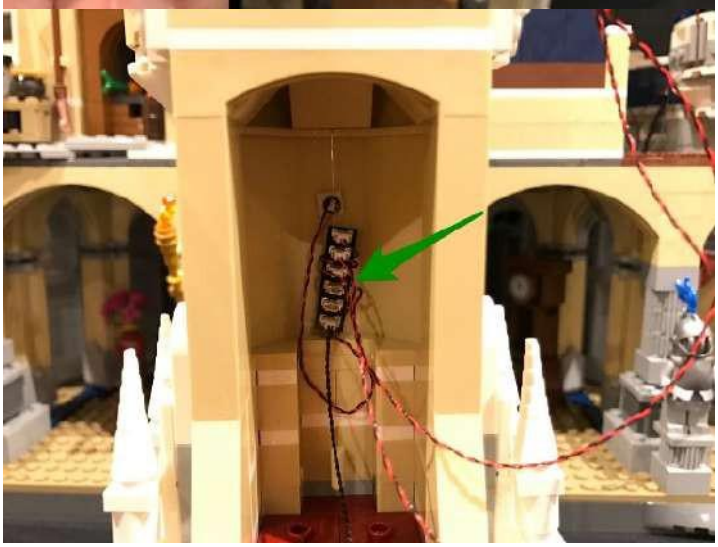


Take the 2 cables from the lights above, take a 15cm connecting cable, connect them to the expansion board

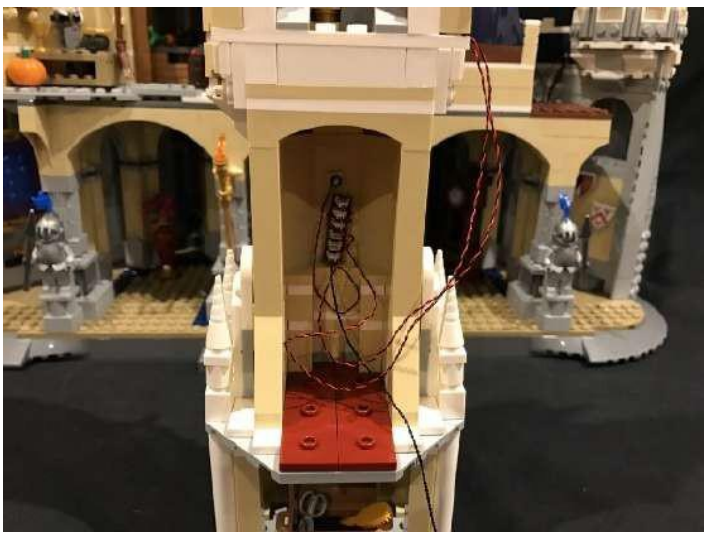


stick the expansion board to the following place on the wall by using 2 adhesive squares





Tuck excess cable at the back, reconnect the mirror.



Secure the cables at the wall by using the tapes

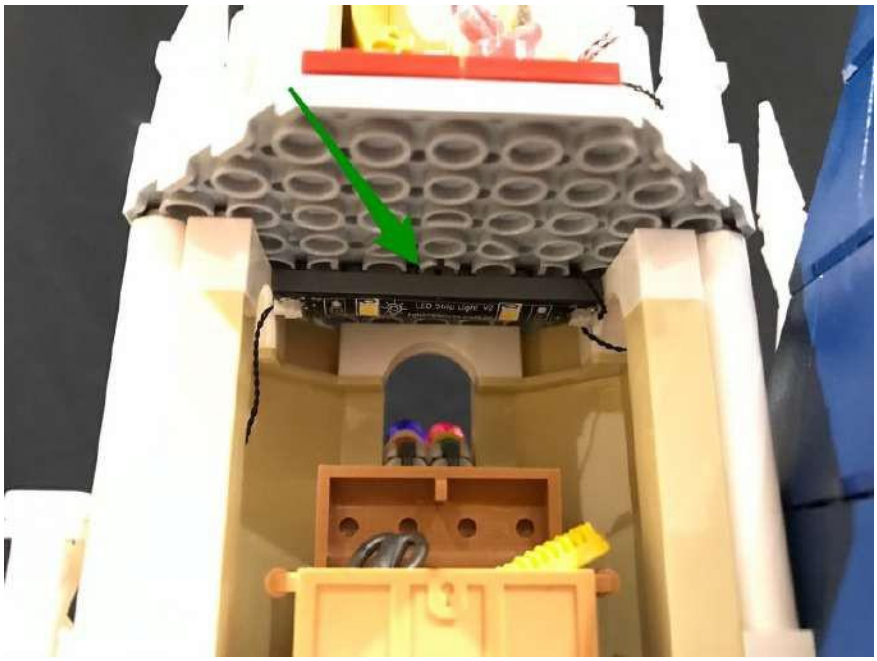
thread the following 15cm connecting cable through the window at the right side as per blow

58.) take the last strip light(striplight#6), stick it to a 1x6 plate, connect the other end of the above 15cm connecting cable to its right port

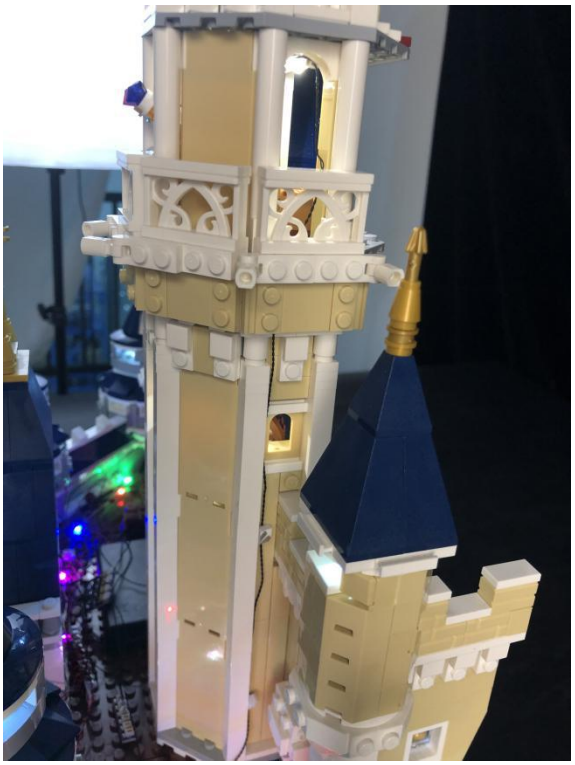
reconnect the roof back to the castle.

Take a 50cm connecting cable, connect it to the left port of the stoplight#6

Place the striplight#6 to the following place



59.) hide the cables as per below, secure the cables in place by using the adhesive squares



This completes installation of this LED Lighting Kit. ENJOY!