

71043 Hogwarts Castle P10305

- **P10305 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 “71043 P10305”.**
- **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 17 bags in this set. The name and quantities of specific components are as shown , please check carefully.

Label	Content	Quantity
Bit Lights-15CM-Warm White	Bit Lights-15CM-Warm White	35
Bit Lights-15CM-Red	Bit Lights-15CM-Red	1
Bit Lights-15CM-Green	Bit Lights-15CM-Green	1
Bit Lights-15CM-Blue	Bit Lights-15CM-Blue	1
Bit Lights-30CM-Warm White	Bit Lights-30CM-Warm White	17
Bit Lights-30CM-Pink	Bit Lights-30CM-Pink	1
Multi-Colour Lights 15CM	Multi-Colour Lights 15CM	6
Multi-Colour Lights 30CM	Multi-Colour Lights 30CM	3
LED Strip Lights-Warm White	LED Strip Lights-Warm White	7
Expansion Board	6 Socket Expansion Board	6
	8 Socket Expansion Board	8
USB Power Cable	USB Power Cable-30CM	1
Connecting Cables-5CM	Connecting Cables-5CM	7
Connecting Cables-15CM	Connecting Cables-15CM	2
Connecting Cables-30CM	Connecting Cables-30CM	8
Connecting Cables-50CM	Connecting Cables-50CM	6
Multi-Colour Strips	Multi-Colour Strips	3
Parts package		

Please contact us immediately if there have any missing components.

Section B: Test that each components is working properly.

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



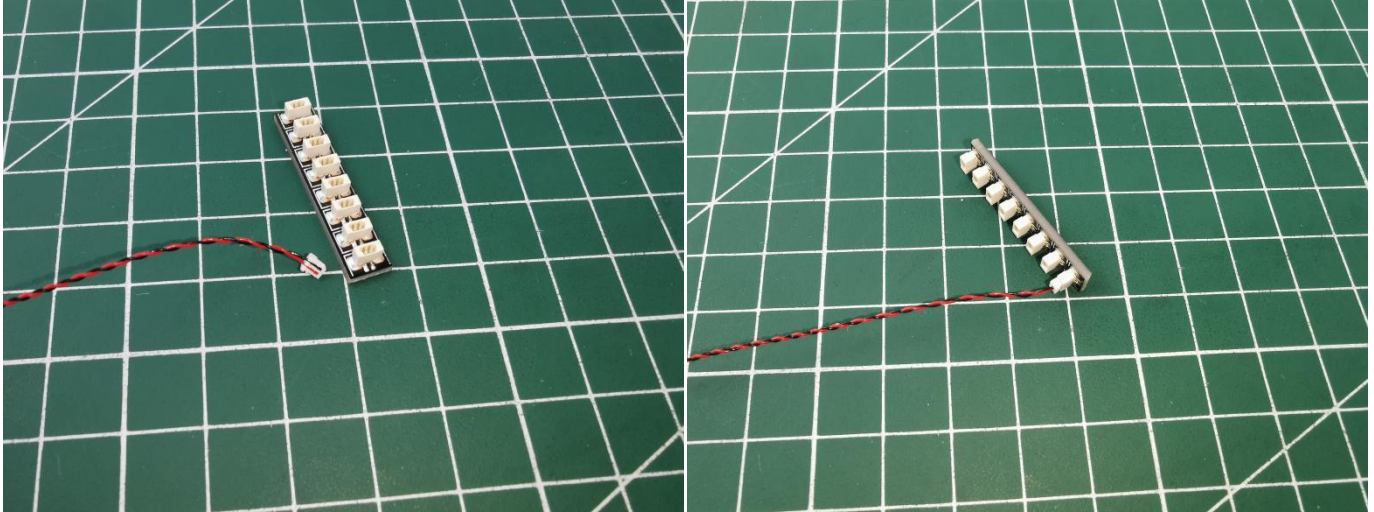
It is worth reminding that our products are all customized. They have a unique way of connecting. The white plug on wire and the socket of the expansion board need to be connected together to transmit power.

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



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

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



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

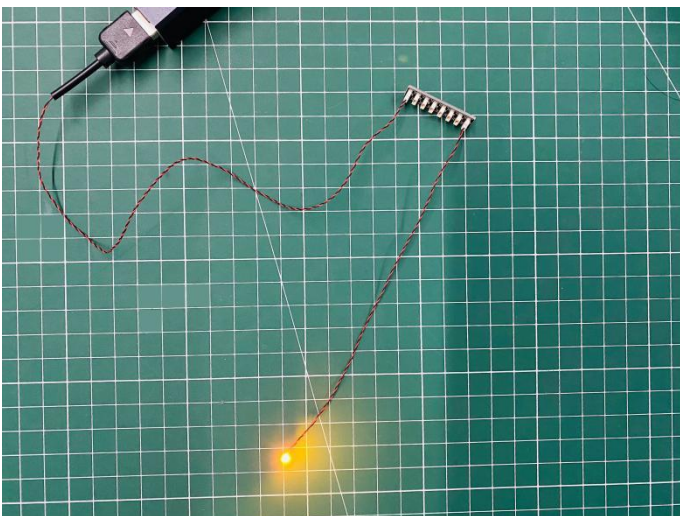
USB connectors to connect devices



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



when we test "Bit Lights-15CM-Warm White" particles,Take out the bag labelled "Bit Lights-15CM-Warm White".Take out one of the light and connect it to the socket. Turn on the power bank, the light will turn on normally as shown below.



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



The components needs to be tested in this set is 34*Bit Lights-15CM-Warm White,1*Bit Lights-15CM-Red,1*Bit Lights-15CM-Green,1*Bit Lights-15CM-Blue,17*Bit Lights-30CM-Warm White,1*Bit Lights-30CM-Pink,6*Multi-Colour Lights 15CM,3*Multi-Colour Lights 30CM,7*LED Strip Lights-Warm White,3*Multi-Colour Strips.

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

Section C: laying out components following the instruction.

1. First divide the castle into 2 parts, the first part on the right and the second part on the left, as shown below.



2. Start from installing lights for the tower



3. Remove the top of the tower



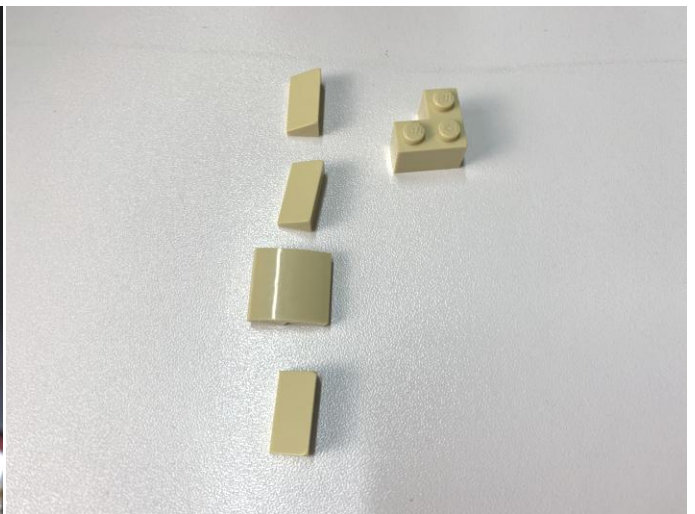
4.Remove the pieces next to the following window



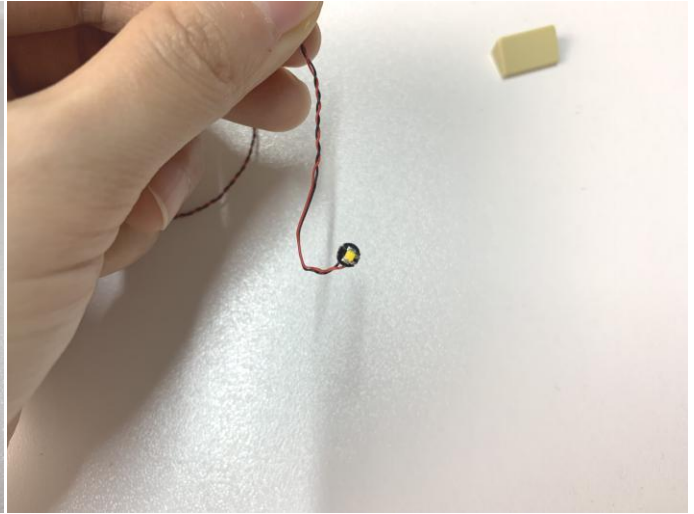
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7. Take a 30cm warm white dot light, bend the cable near the LED component to 90°



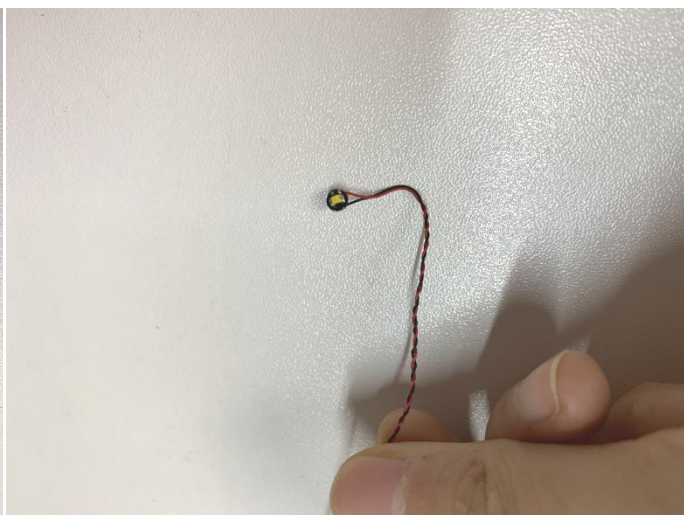
8. Thread the dot light through the hole beside the window into the building. (with lighting side facing the front, secure the light at the top of the window)



9.Reconnect the pieces beside the window, secure the cable underneath the plates in between studs



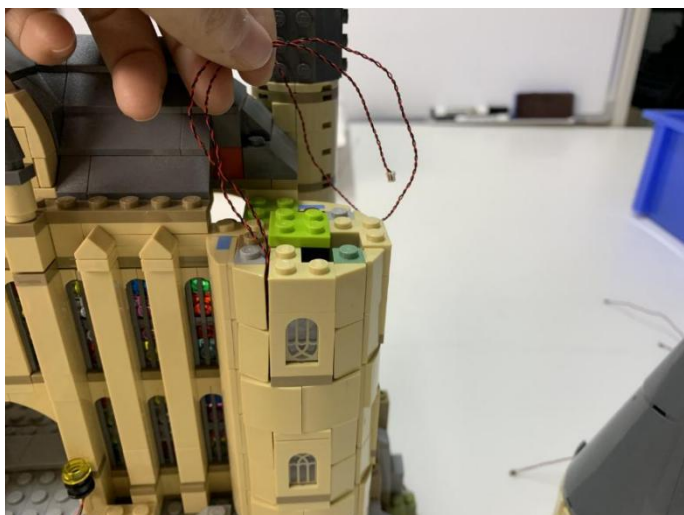
10.Take a 15cm warn white dot light, repeat the previous steps to install it to the window above



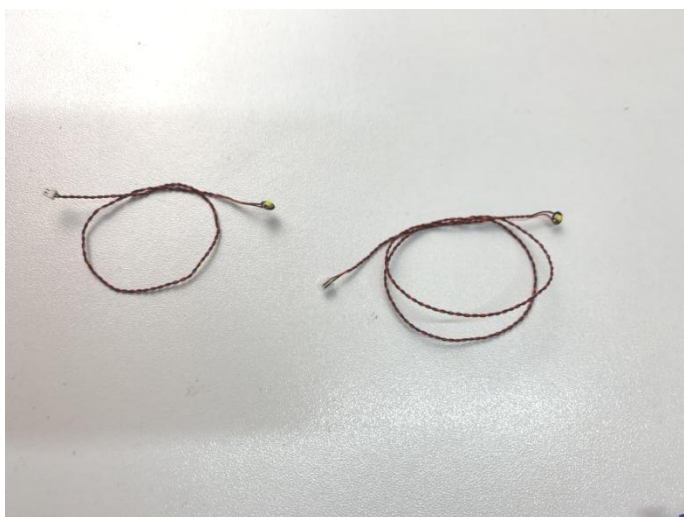
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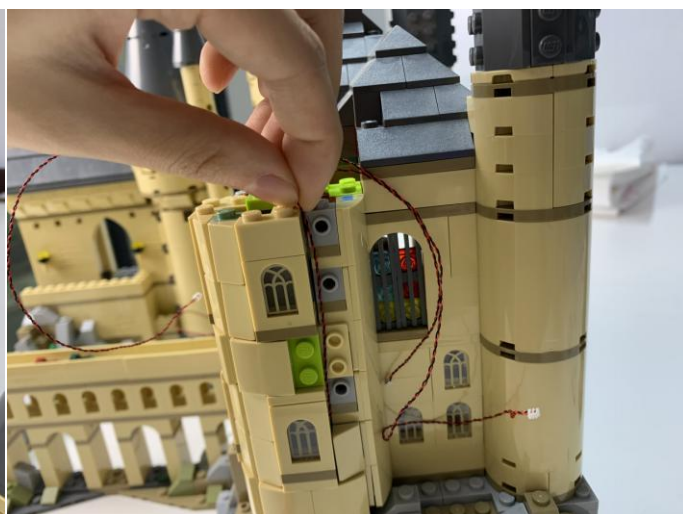
12.Reconnect the pieces, secure the dot light

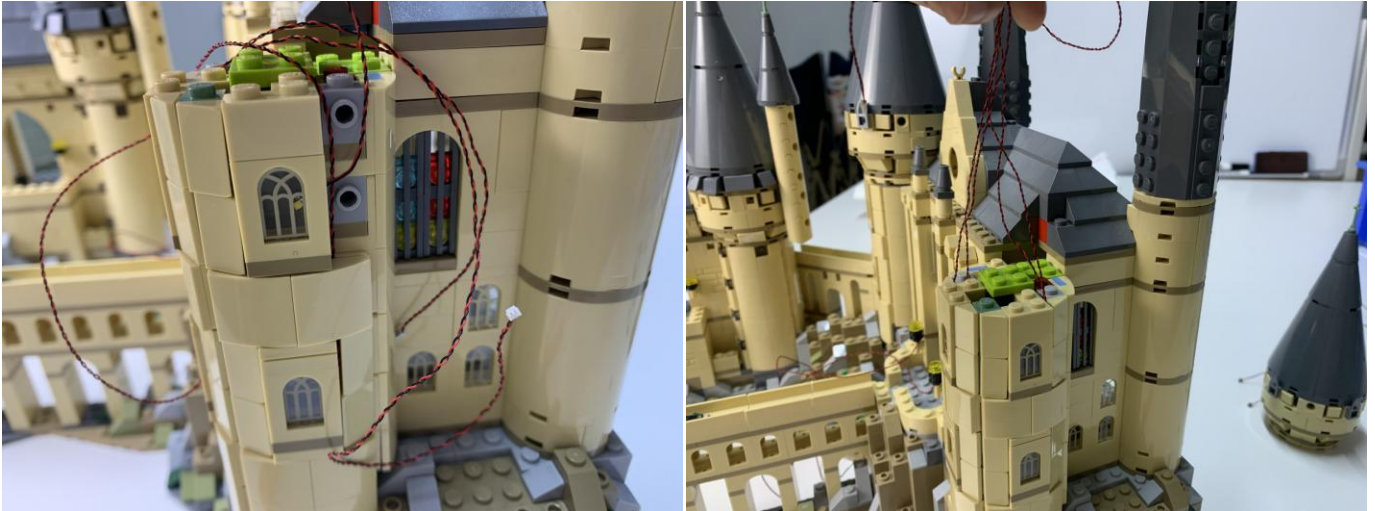


13.Take a 30cm warm white dot light, a 15cm warm white dot light

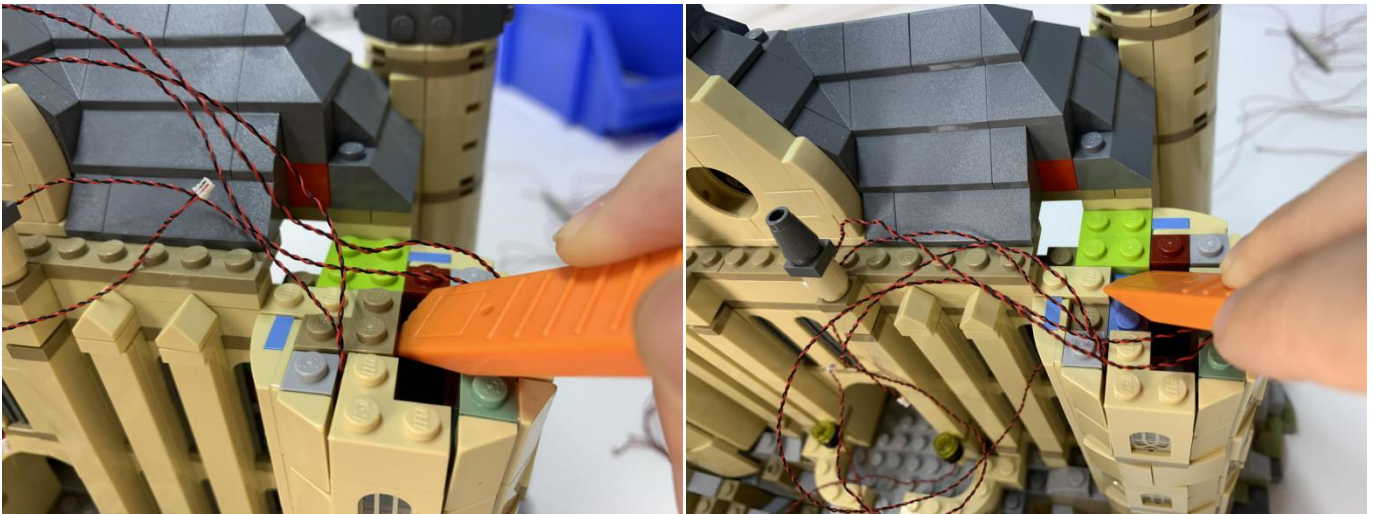


14.Repeat the above steps, install lights for the windows at the right side

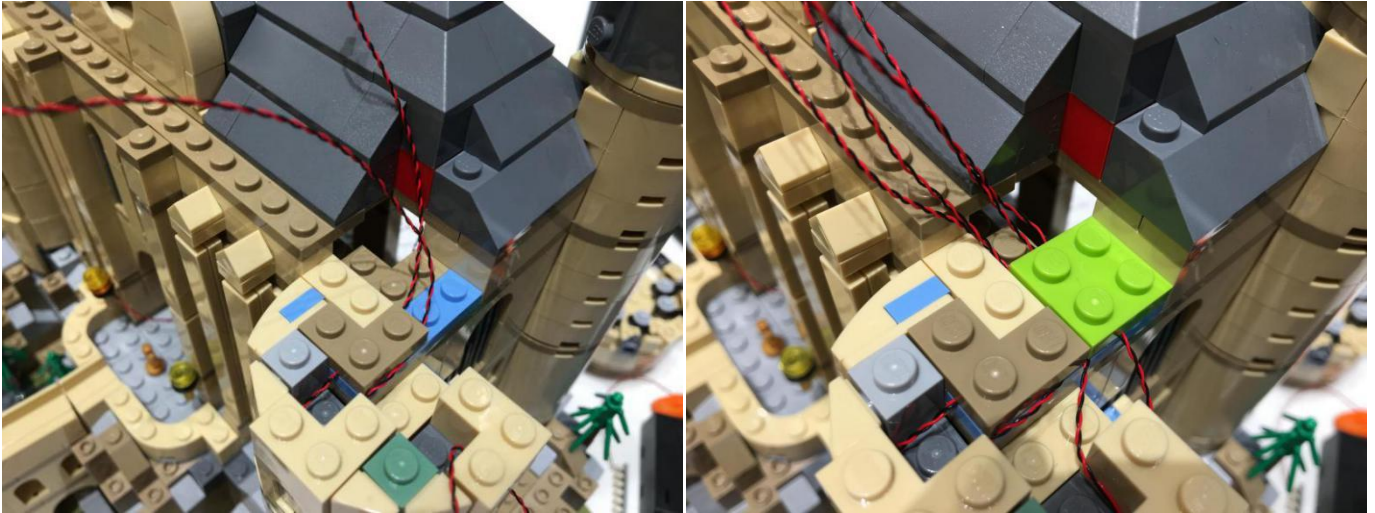




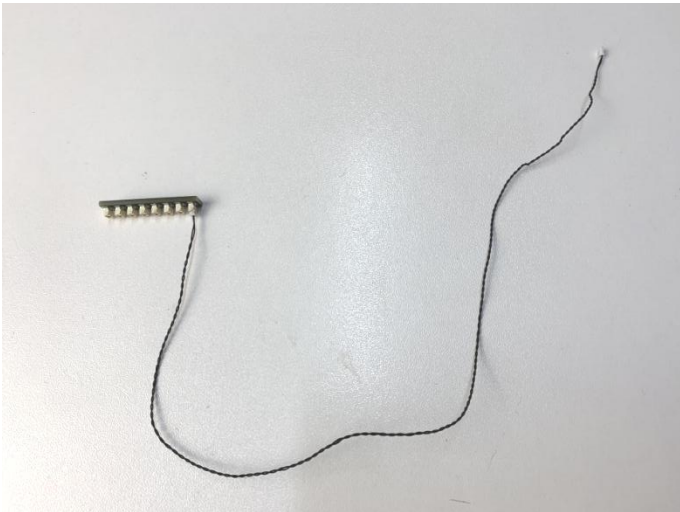
16. Remove the plates from the surface of the tower, pull the cables of the lights to the place between the column and the gray roof. Place the cables underneath plates in between studs before reconnecting the plates



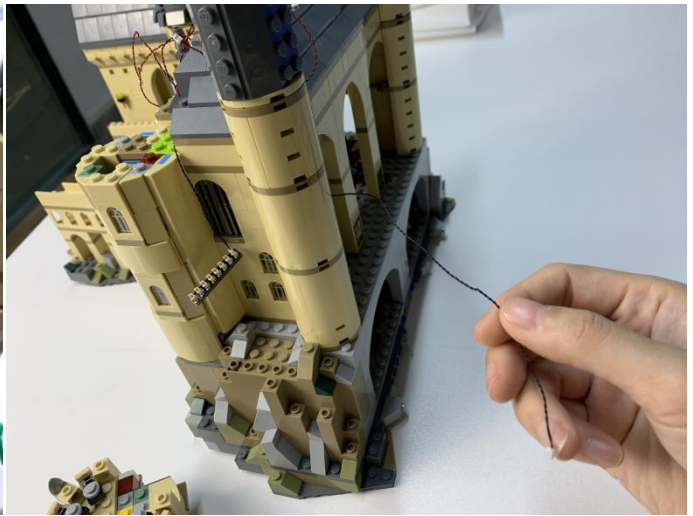
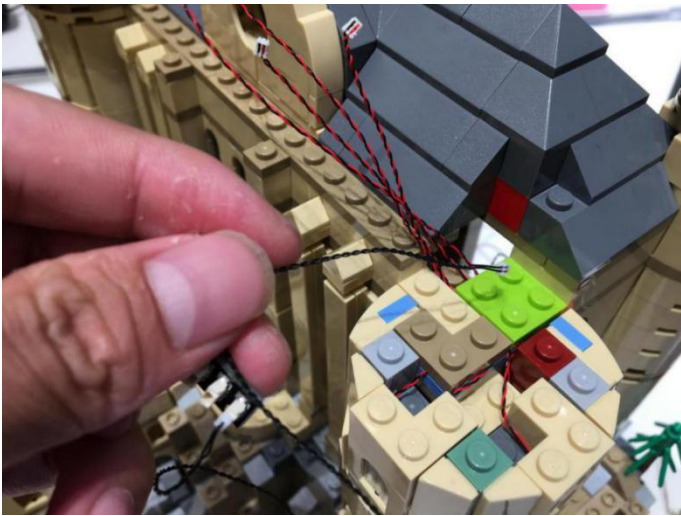
17



18. Take a 30cm connecting cable, a 8-port expansion board, connect the cable to the expansion board



19. Connect the other end of the cable to the gap between the column and the roof, pull the cable out from the other side of the building. Leave about 7cm for the side with expansion board



20. Disassemble the top of the tower as per below

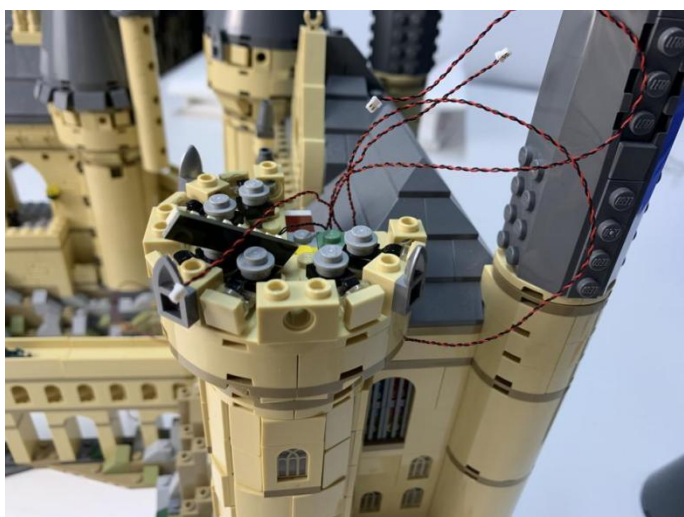


21. Take the following pieces, connect them to the tower as per below.

Pull the cables of the dot lights and the expansion board out

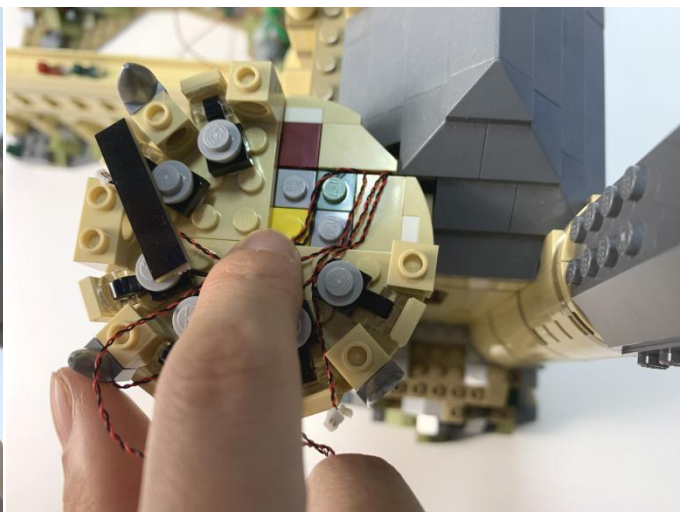
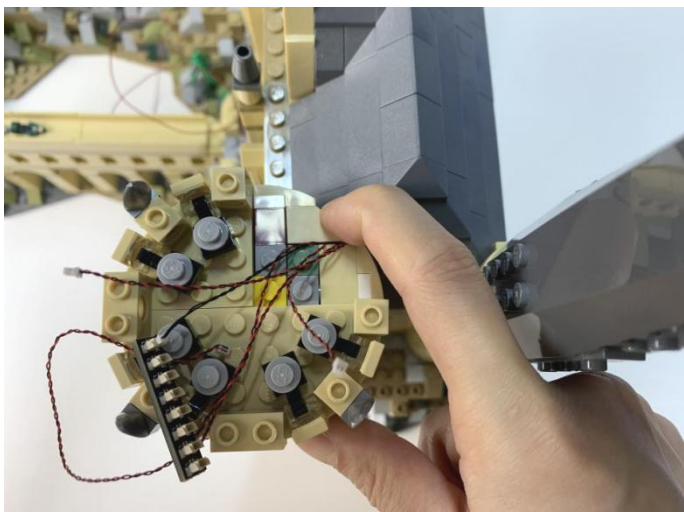


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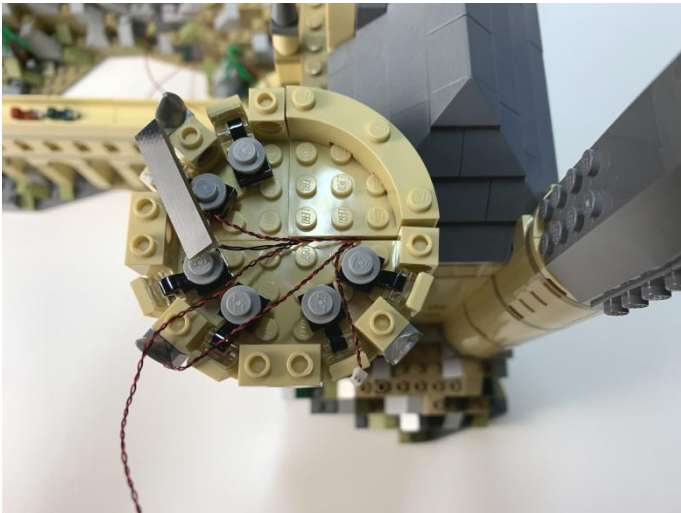


23. Reconnect the 3 yellow pieces we removed before, place the

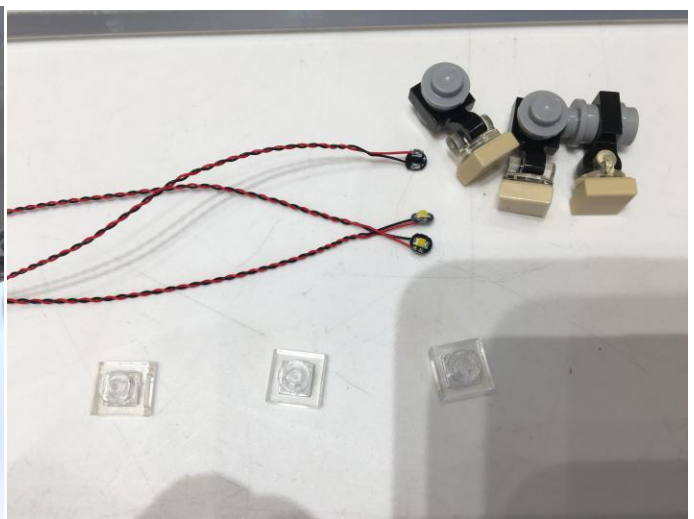
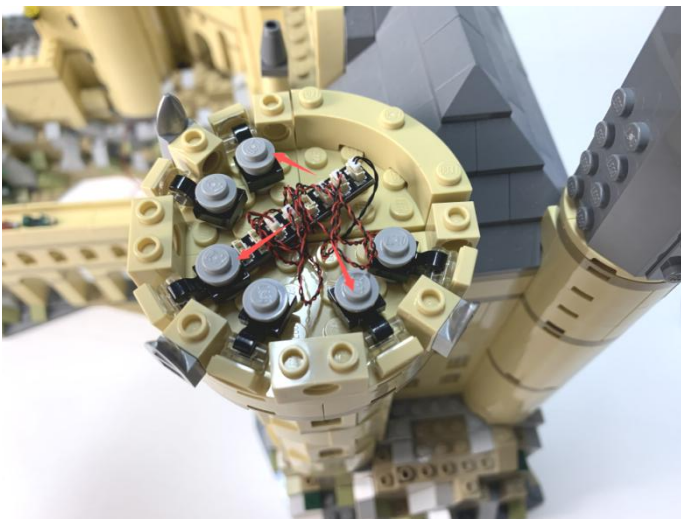
cables underneath in between studs.



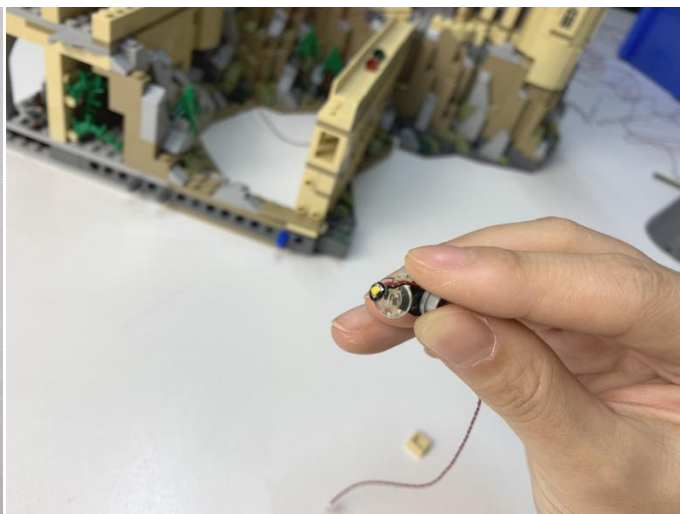
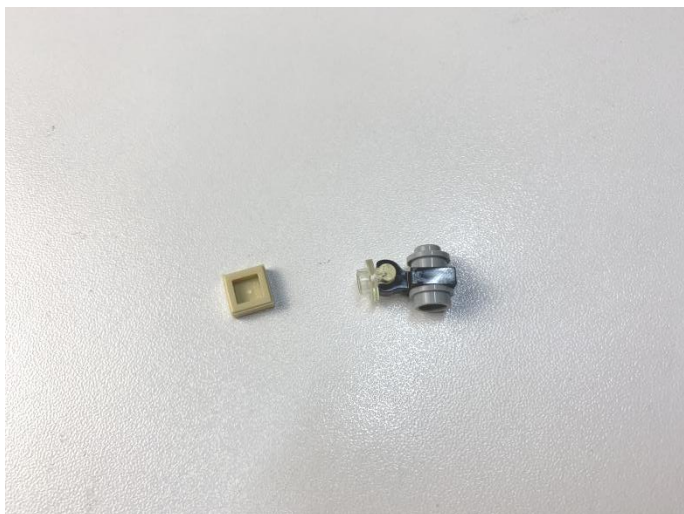
24



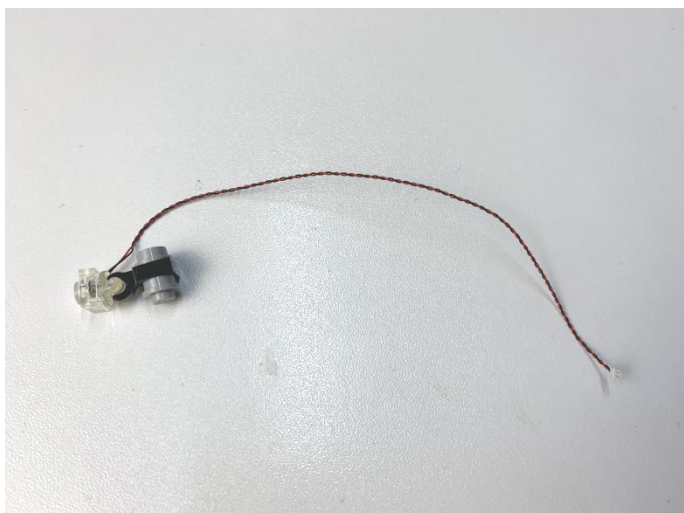
25. Remove the following pieces, take 3 warm white 15cm dot lights, 3 trans 1x1 bricks



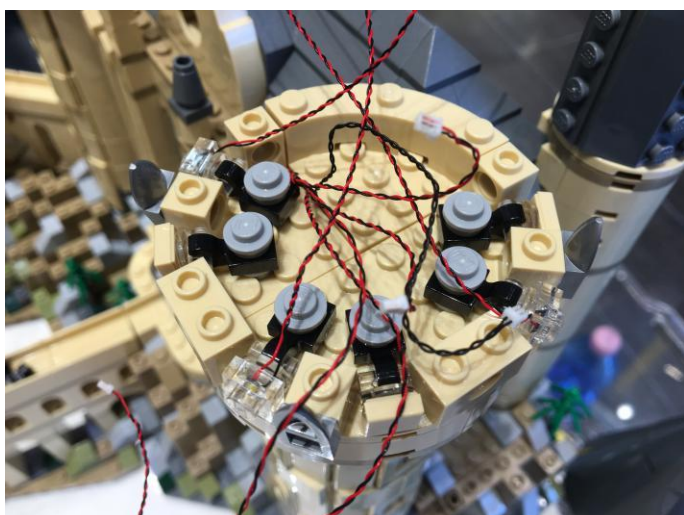
26. Disassemble the pieces as per below, replace the yellow pieces with trans bricks, assemble the lights and reconnect them as per below



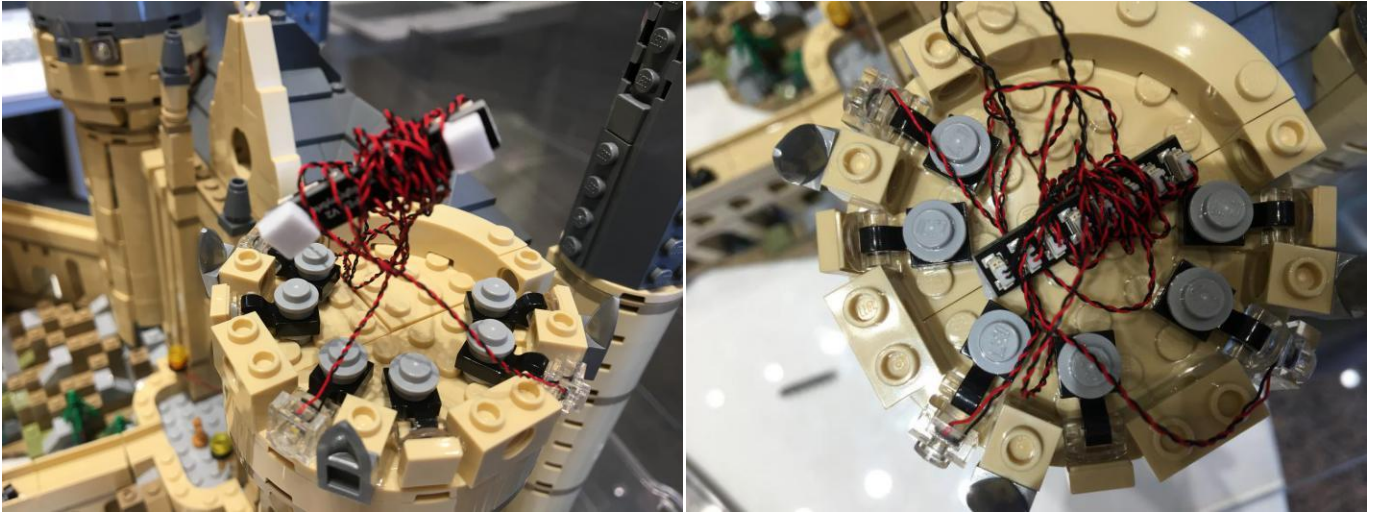
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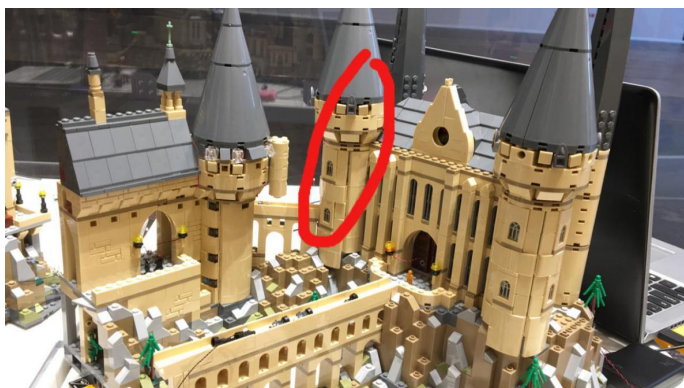
29. Connect all cables of dot lights to the 8-port expansion board, stick tapes to both sides of the board, tuck excess cables around the expansion board, stick it to the baseplate, reconnect the top of the tower



30. Pull the 30cm cable out from the other side of the building, connect it to the battery pack to check if all the lights are working OK



31. Take 2 warm white 30cm dot lights, 5 warm white 15cm dot lights, a 30cm connecting cable, a 8-port expansion board, 3 trans 1x1 bricks, repeat the previous steps to install lights to another tower



32. We' ll move onto installing lights for the door. Remove the torches



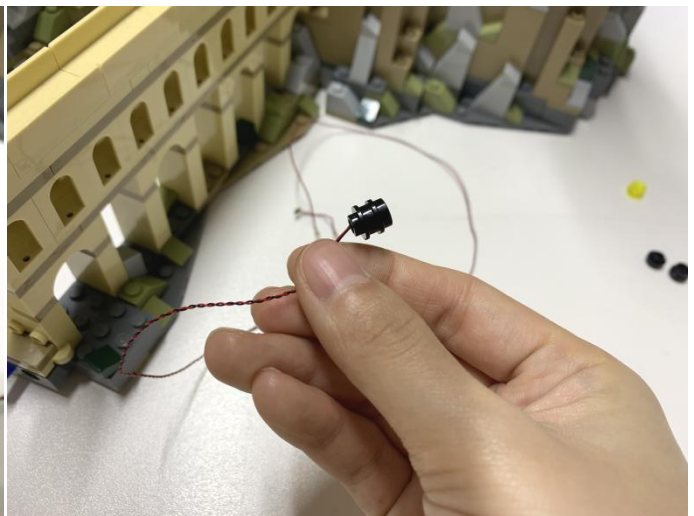
33



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



35. Thread the connector of the light through the hole on the black plate, pull the cable till the lighting side is facing up. Connect the black round plate and the yellow round plate over the light



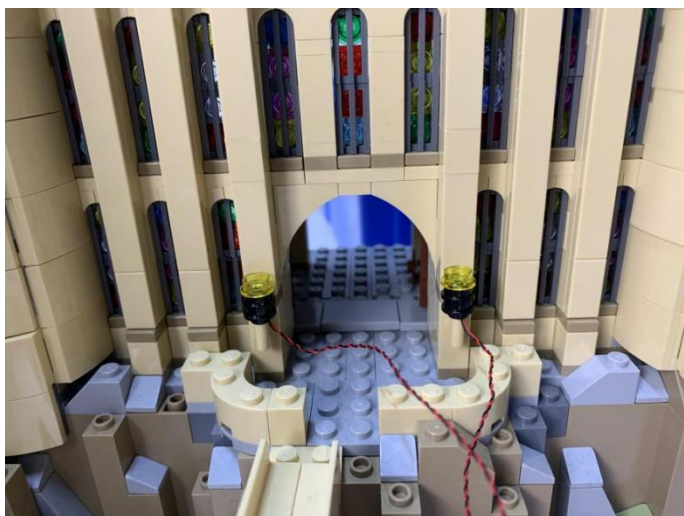
36



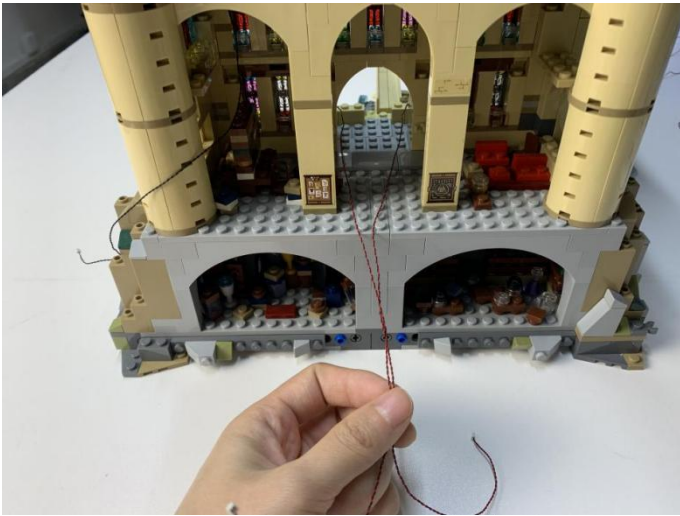
37.Reconnect the light back to the door



38.Repeat the above steps to install the other dot light



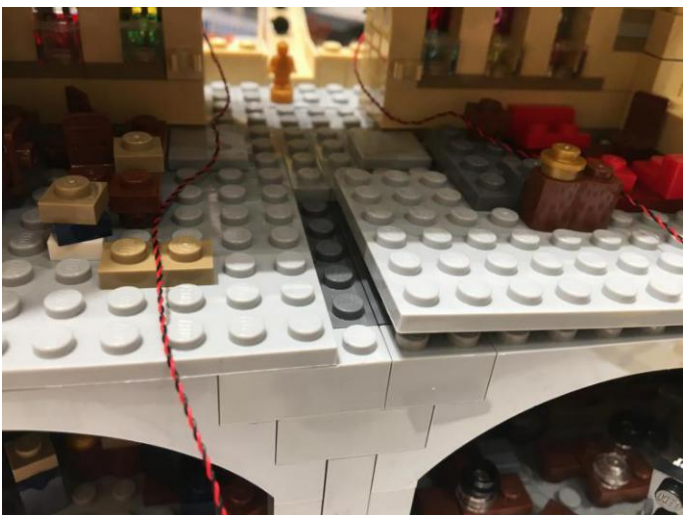
39. Turn to the other side of the building, pull the cables of the lights out



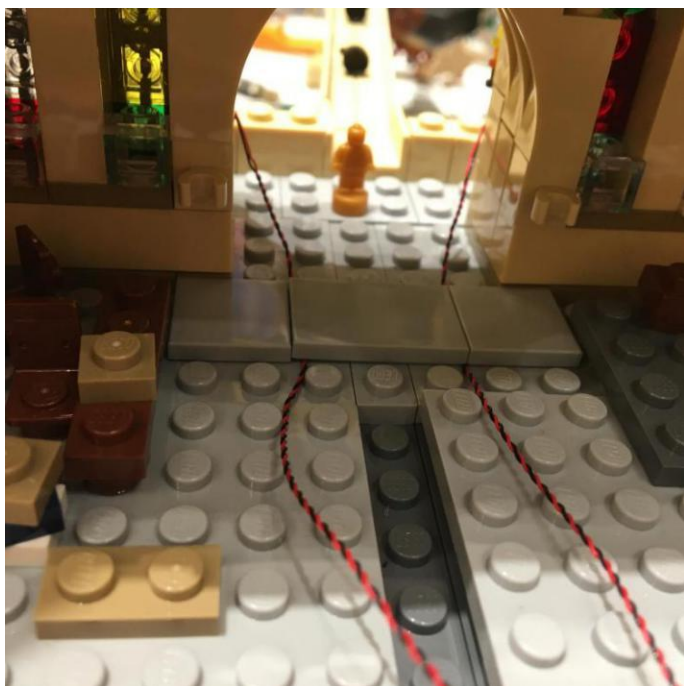
40. Remove the following 2 pillars and the door



41. Remove the 2x3 plate and the 1x6 plate. Slightly lift the base plates at the right side



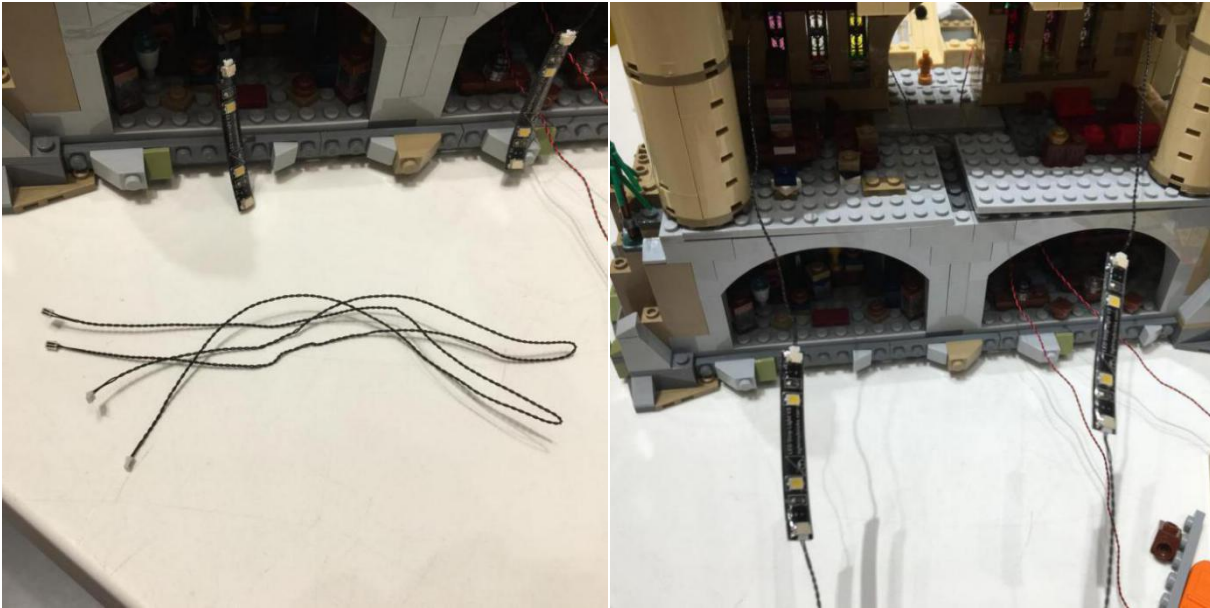
42.Hide the cables underneath in between studs, thread them through the gap between the plates at the right side, then, pull them out from the lower floor



43.Take 2 warm white strip lights, connect the 30cm connecting cables from both towers to them



44. Take two 30cm connecting cables, connect them to the other sides of the 2 strip lights



45. Stick a strip light to the right side of the roof, tuck excess cable around the strip, thread its cable through the gap we made before to the lower floor



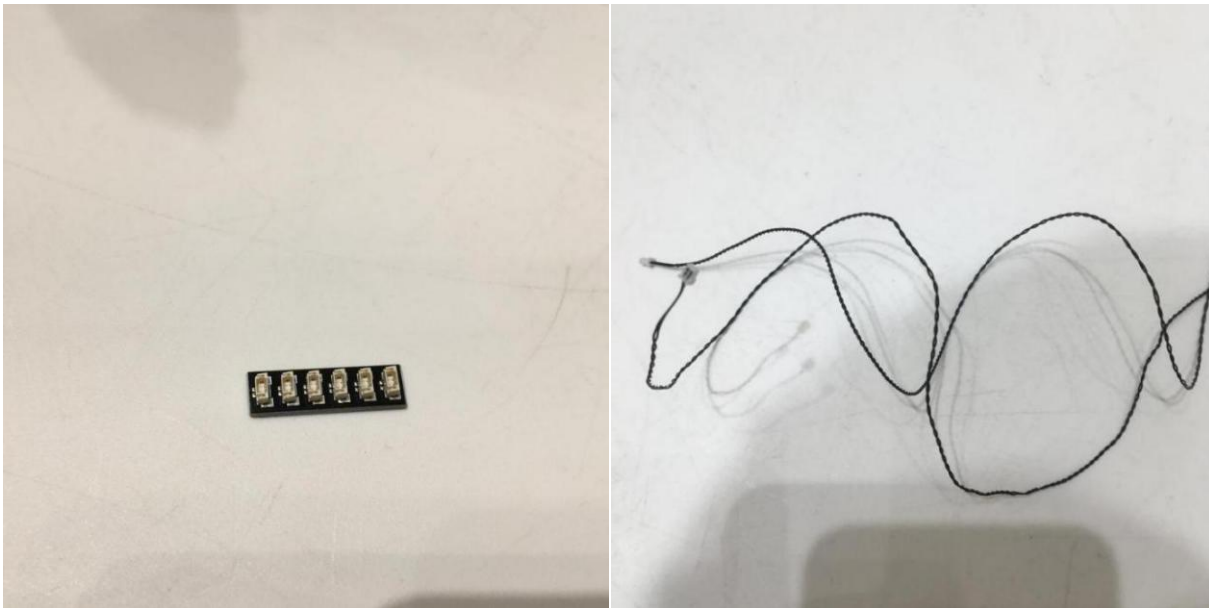
46. Connect the other strip to the left side as we did for the previous strip, also thread its cable to the lower floor. Ensure the cable is placed underneath in between studs



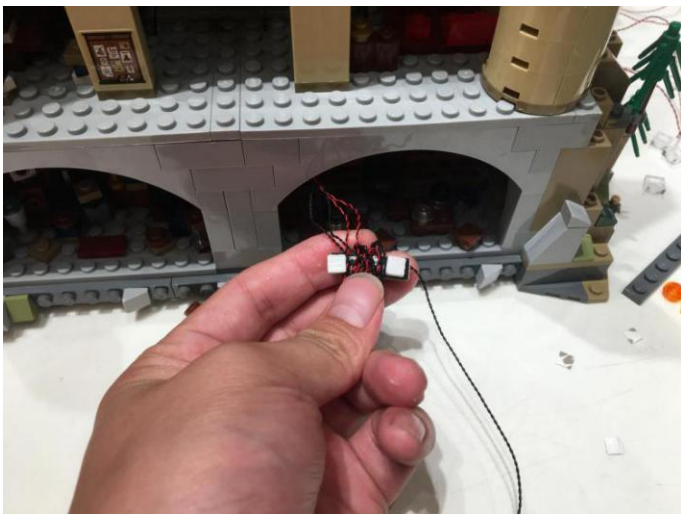
47. Reconnect all the pieces



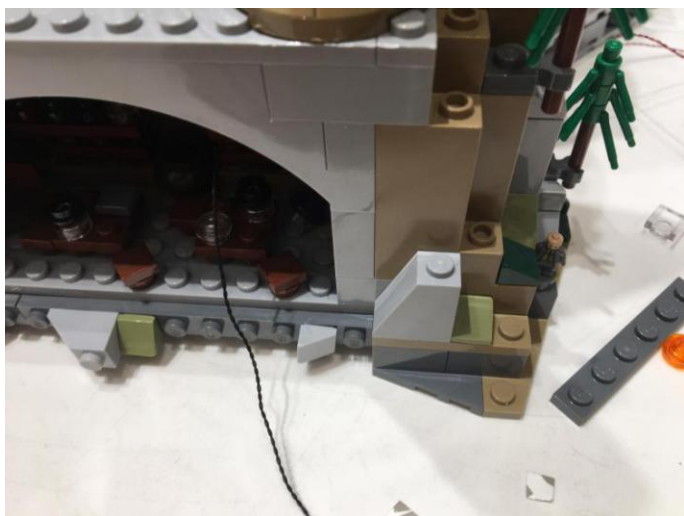
48. Take a 6-port expansion board, a 50cm connecting cable



49. Connect the 50cm cable to the expansion board, connect all the cables of the lights to the expansion board, stick tapes at both sides of the board, stick the board to the ceiling of the ground floor



50. Pull the 50cm connecting cable out from the right side of the building.



51



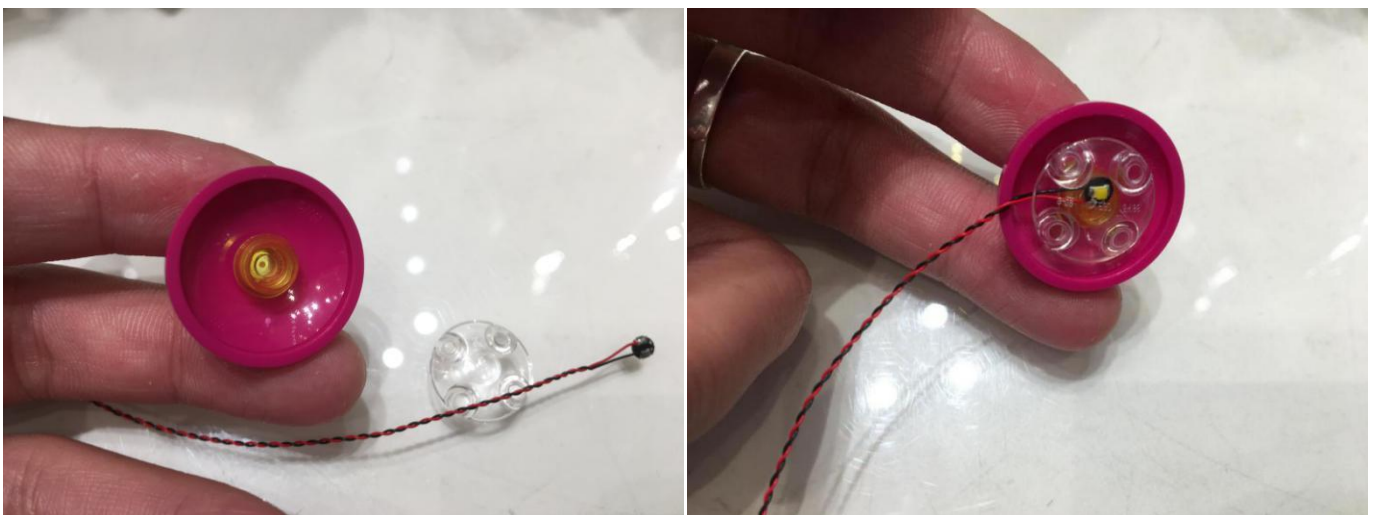
52. Connect the 50cm connecting cable to the battery pack to verify the current



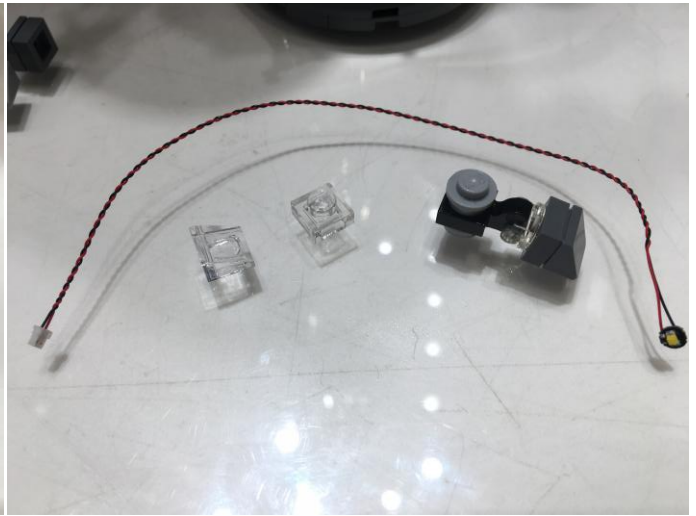
53. Continue to install lights for another tower. Disconnect the following pieces



54. Take a 15cm warm white dot light, a trans round 2x2 plate. Assemble them as per below



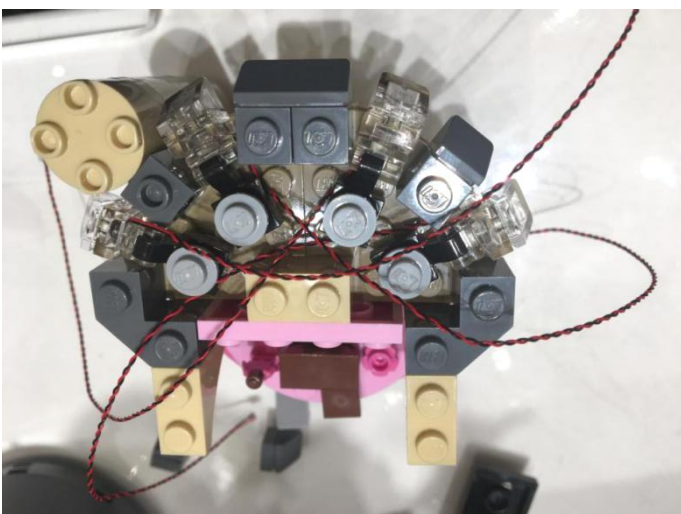
55.Remove the following pieces, take a 15cm warm white dot light, a trans 1x1 plate, a 1x1 slope brick to replace the gray one



56.Assemble them as per below



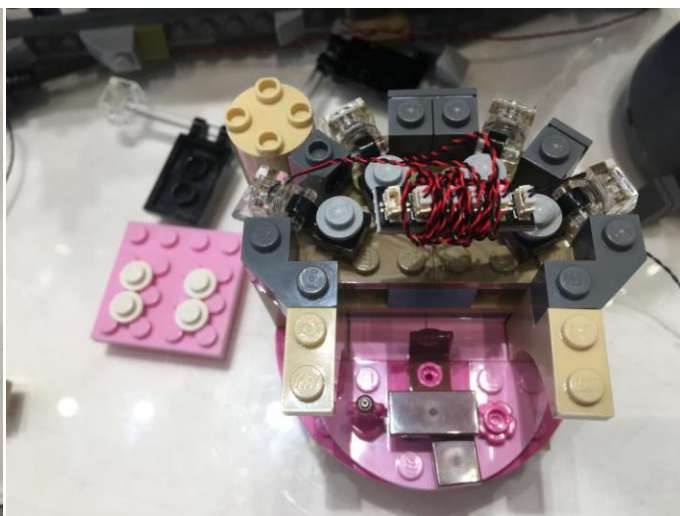
57.Repeat the steps to install the other 3 dot lights



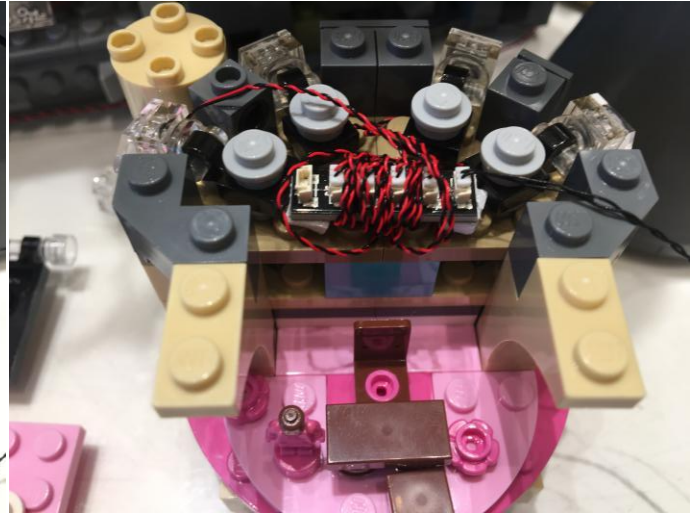
58.Remove the following pieces



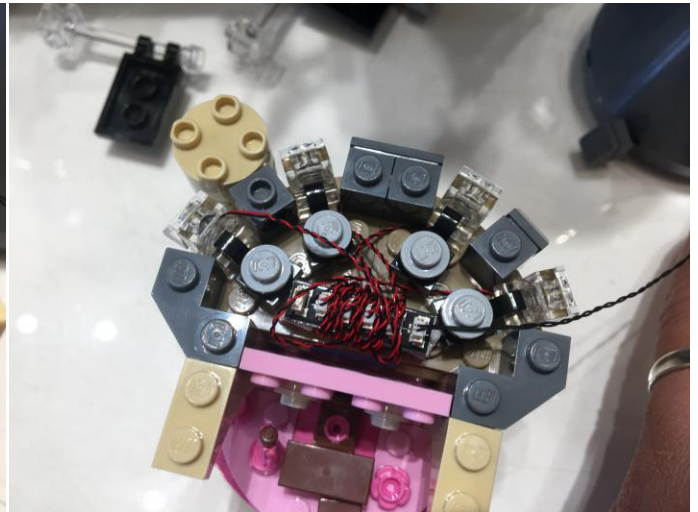
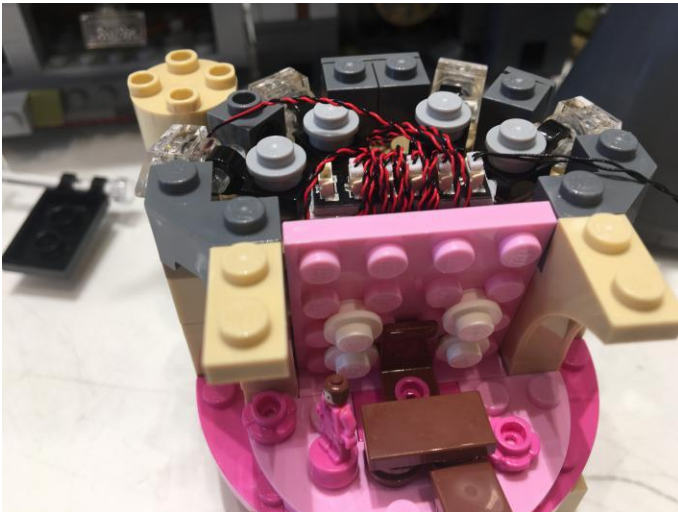
59.Take a 30cm connecting cable, a 6-port expansion board, connect the cable to the board, connect all cables of the lights to the expansion board, stick the expansion board to the base plate by sticking tapes on its bottom



60



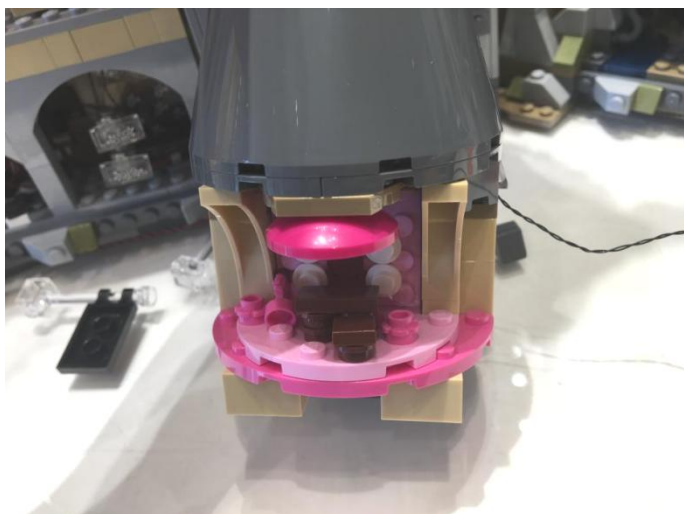
61.Reconnect the pink 4x4 plate, pull the 30cm connecting cable aside



62.Reconnect the top of the tower, connect the cable of the light at the roof to the 6-port expansion board, tuck excess cable around the board



63.Connect the 30cm connecting cable to the power to test if all lights are working OK



64. Lift the floor, remove the pillars and the baseplates from the middle



65. Thread the 30cm connecting cable from the top of the tower through the floors down to the bottom



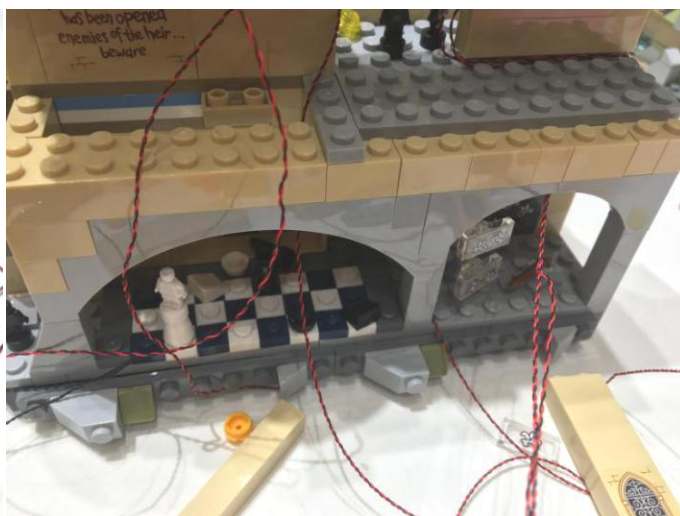
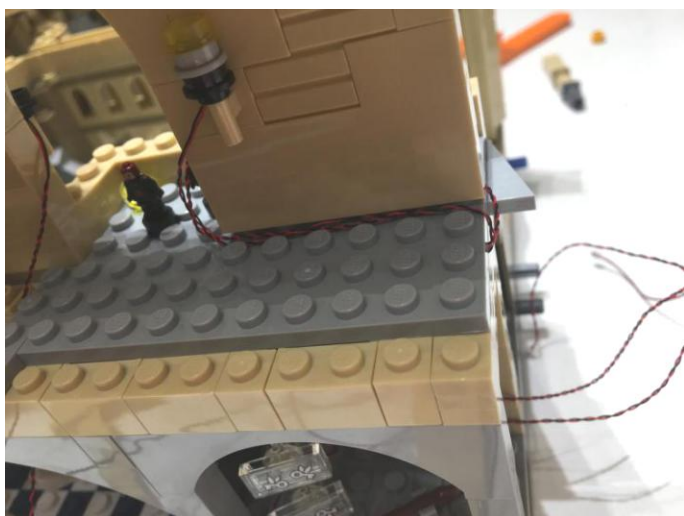
66. Take 2 warm white 30cm dot lights, 2 black round plates with hokes, install the lights to the door, thread the cables through the door to the other side



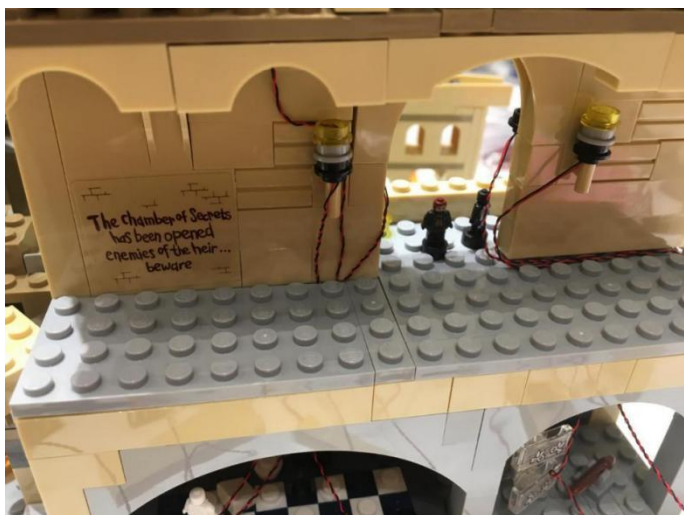
67. Take a warm white 15cm dot light, install it to the torch at the left side, install a warm white 30cm dot light to the torch at the right side. (replace the black round plate with gray ones)



68.Lift the baseplate. Thread the cables from the left side of the door through the gap at the left to the ground floor, thread cables from the right side of the door to the ground floor



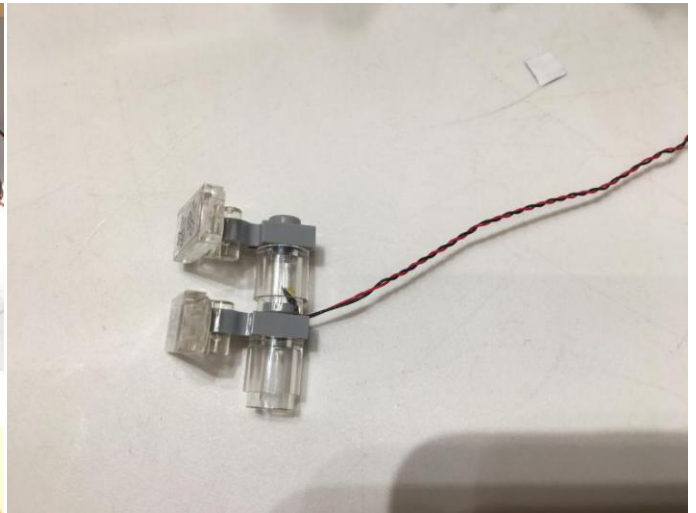
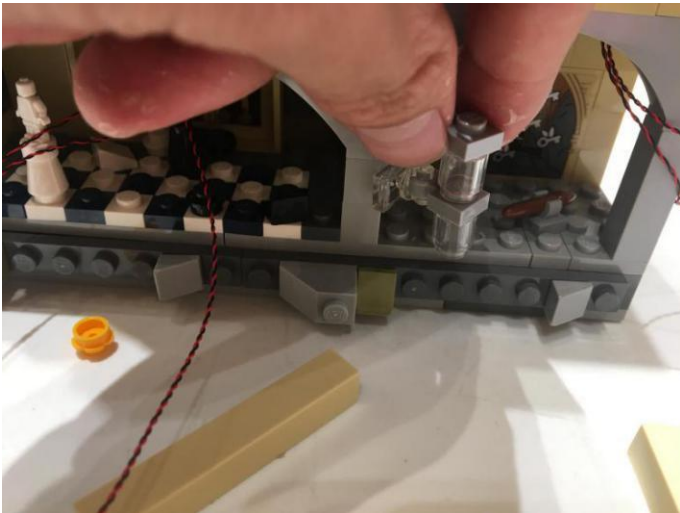
69.Reconnect the baseplate



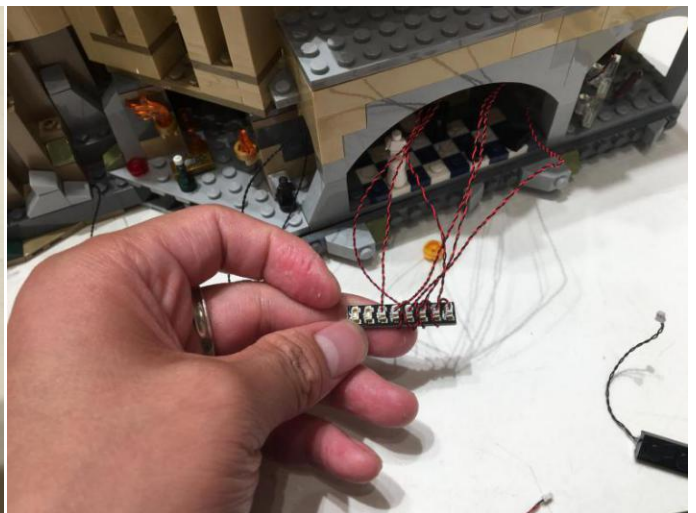
70.Reconnect the other pieces as per below



71. Take a warm white 15cm dot light, install it to the following piece



72. Take a 8-port expansion board, connect all cables we thread to the ground floor to it.



73. Take a 50cm connecting cable, connect it to the 8-port expansion board

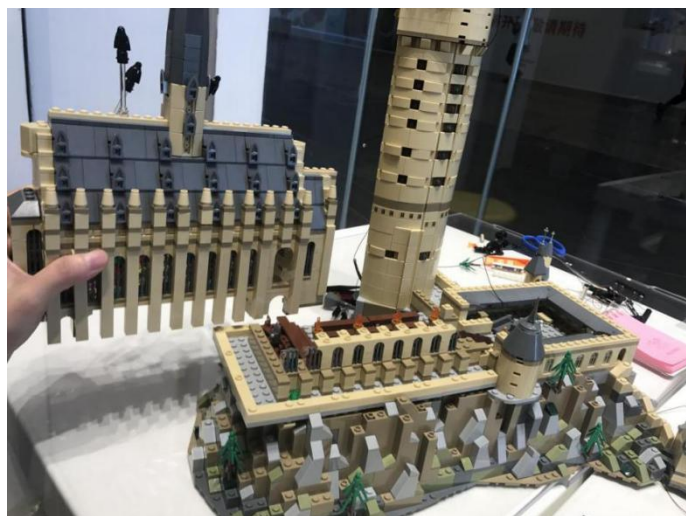


74. Stick tapes to both sides of the expansion board, stick it to the ceiling of the ground floor, pull the 50cm connecting cable to the right



75. Now let's start the second part!

Remove the upper part of the second part of the castle.



76. Then remove the bottom plate.



77. Remove the 9 street lights on the bottom plate.



78. Take nine 15cm warm white Dot Lights. We start to install all the street lights.



79. Take one of the 15cm dots and street lamps to separate the transparent parts of the street lamps.



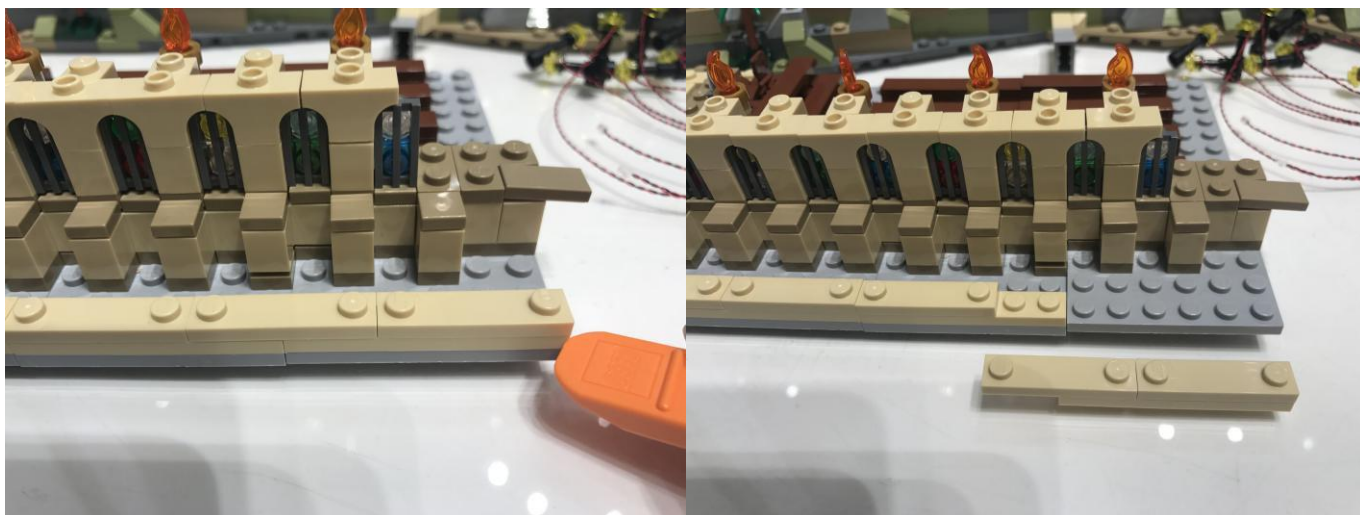
80. Fold the end of the lamp into 90 degrees with the light side facing up.



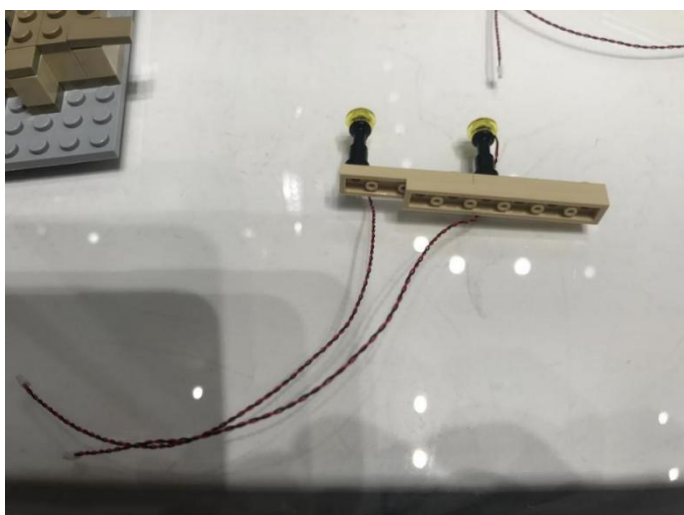
81. The first street lamp was installed by holding it with a transparent piece. Repeated the operation to install the other eight street lights.



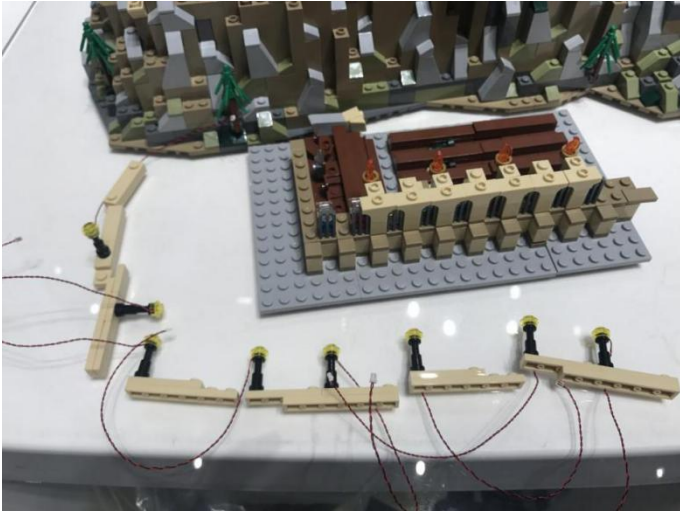
82. Remove the double base plate under the street lamp on the bottom plate



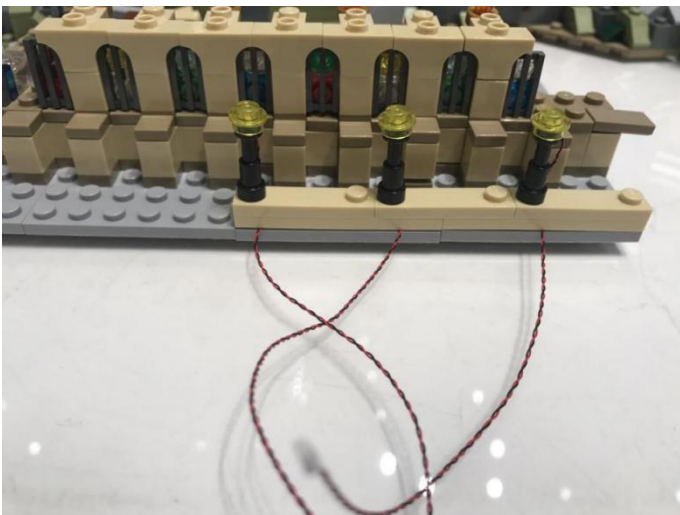
83. Install the street light on the base plate.



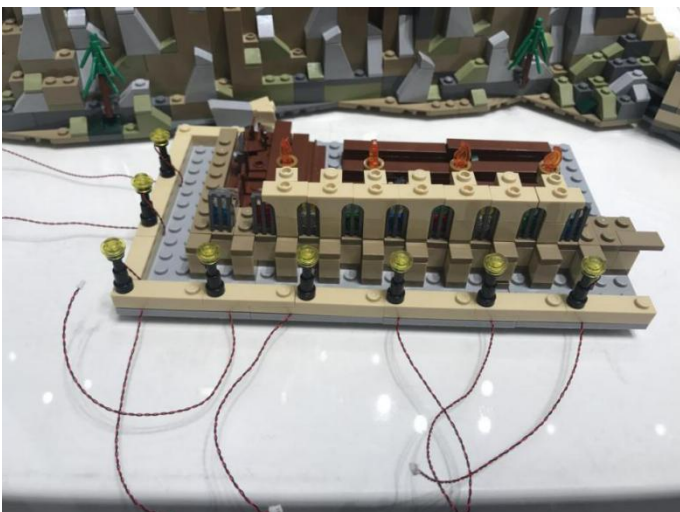
84.Repeat the process, as shown blew.



85.Reconnect the base plate and press the cable against the stud gap under the base plate, as shown below



86.Repeat the operation to complete the installation of all street lamps.



87. Now start installing the torch light on the hut on the right side of the castle.



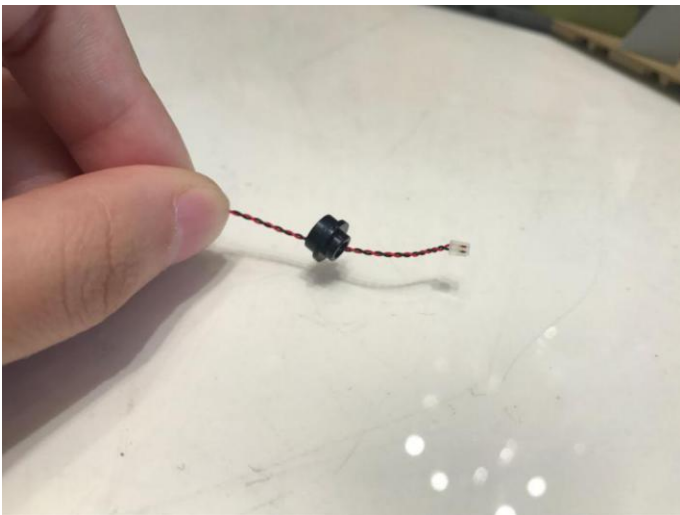
88. Remove the black and yellow round plates.



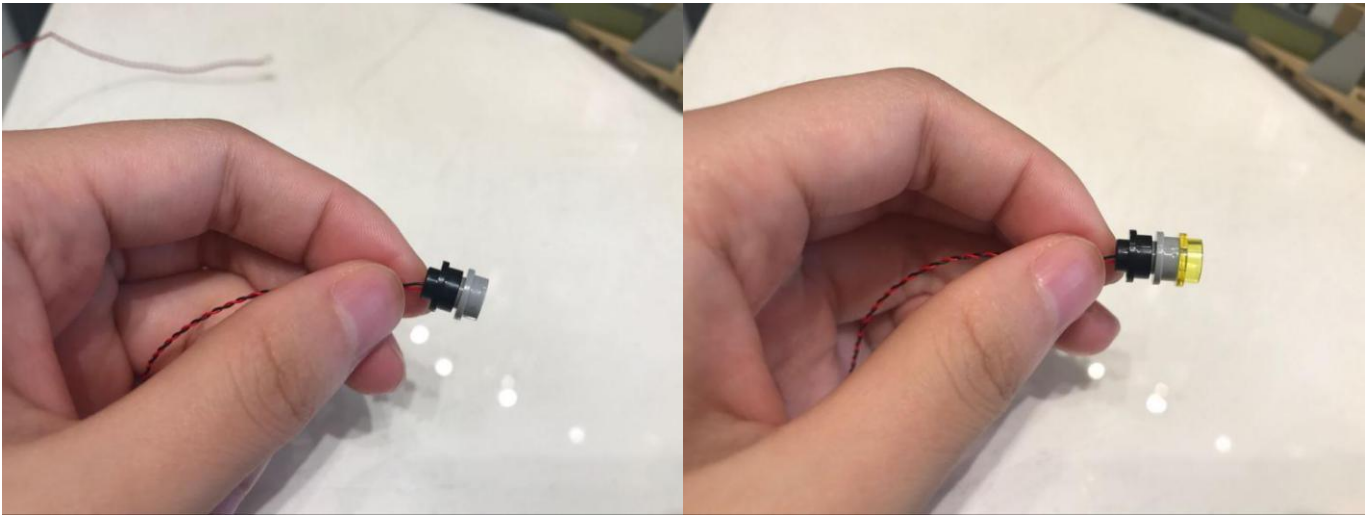
89. Take two 30cm warm white Dot Lights, 2 black small round plates with holes (no black small hole plate at hand, replace it with gray)



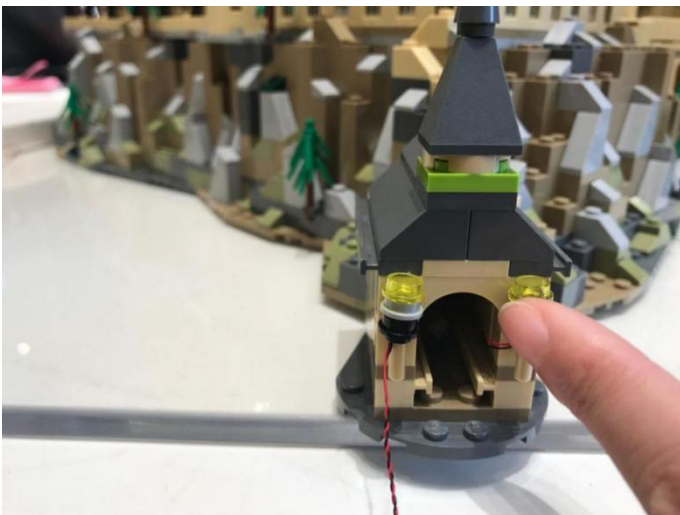
90. Take one of the 30cm warm white lamp dots, pull the plug end out from the side of the black large round hole, and turn the lamp face up.



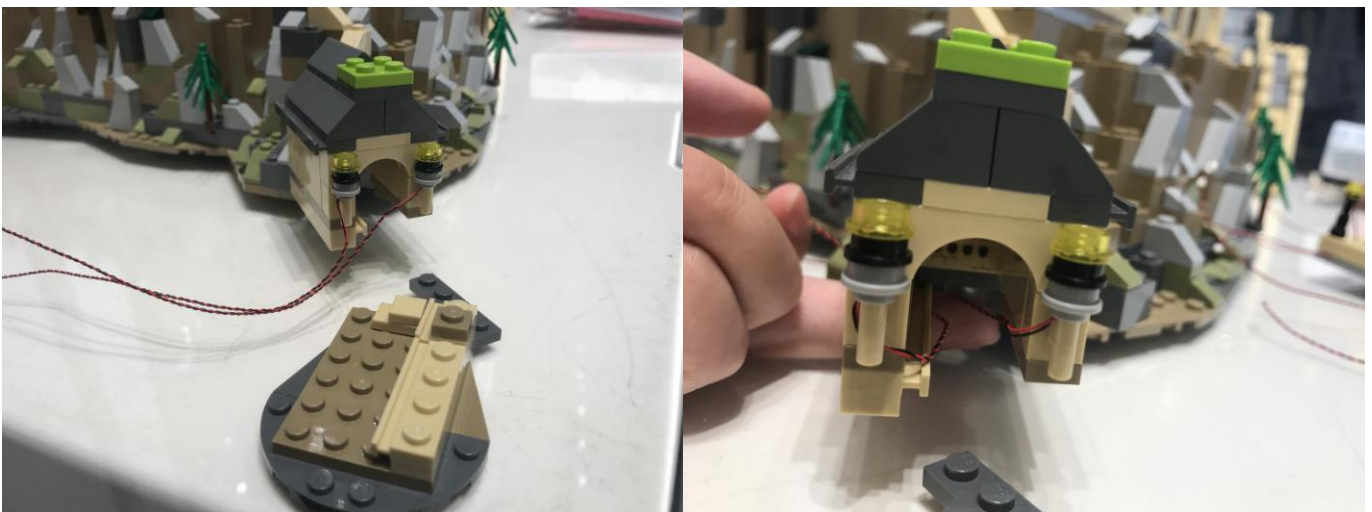
91.Reconnect the yellow small round plate and the yellow small round plate to the cabin.



92.Repeat the process to the other torch.



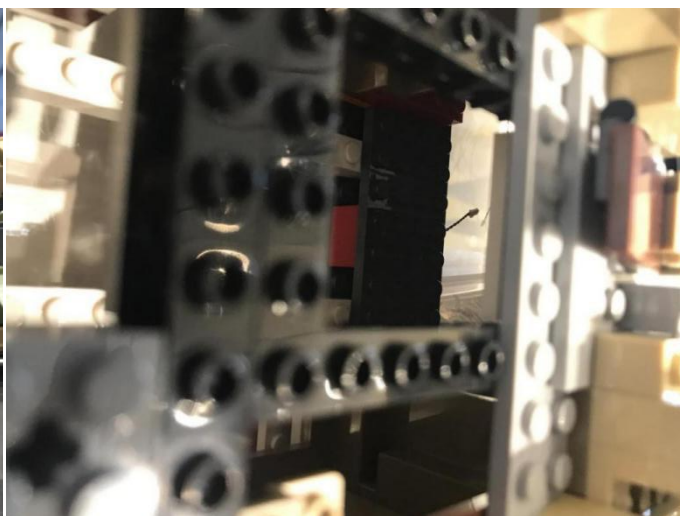
93.Remove the bottom of the cabin and pass the line from the inside of the cabin to the bottom of the castle



94. For the convenience of operation, the bottom plate is padded, slightly inclined, and attention is paid during operation to prevent slipping and collapse, which makes it difficult to restore.



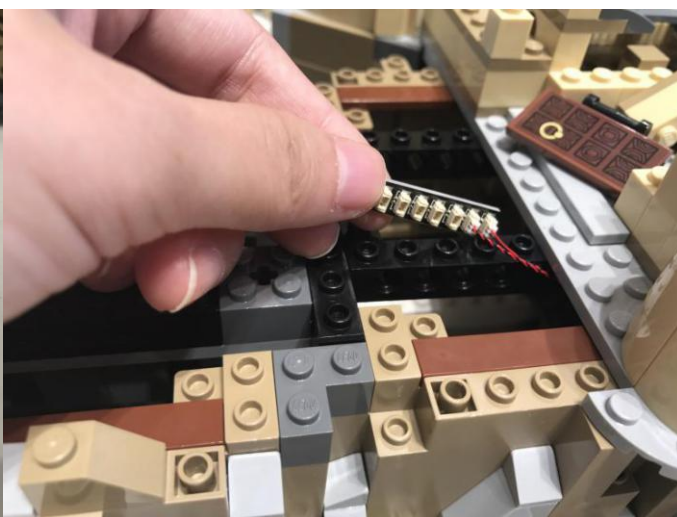
95. Insert the plug end of the just-installed torch light from the hole in the floor into the castle



96. Pull out from the inside castle.



97. Take a 8-port expansion board and connect the cable to two ports.



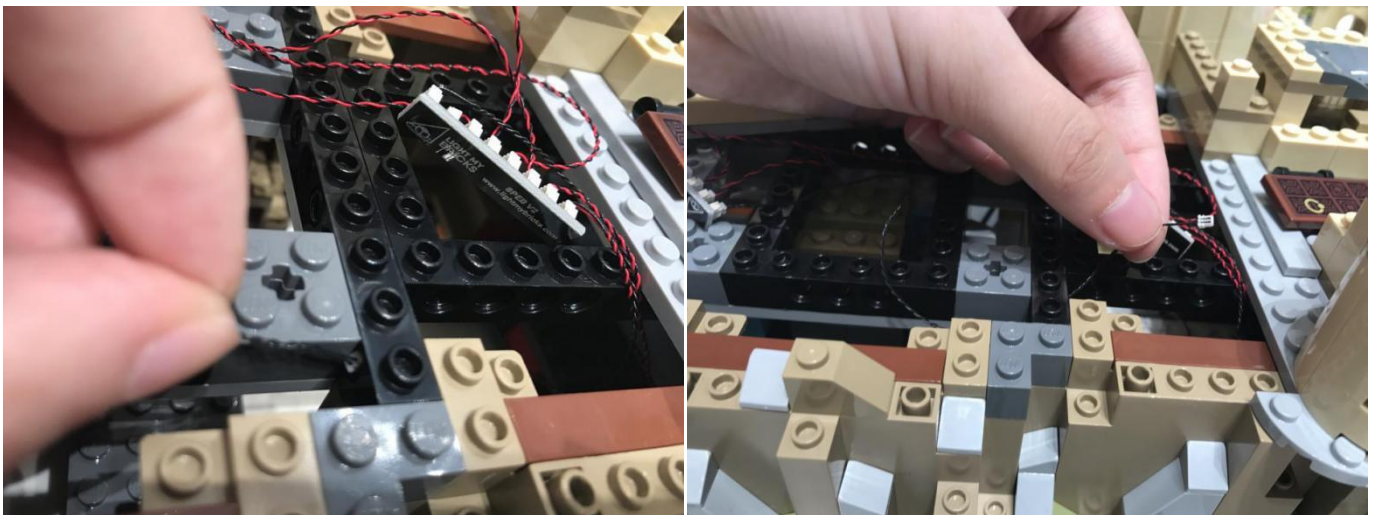
98. Take a 30cm cable and connect it to the 8-port expansion board.



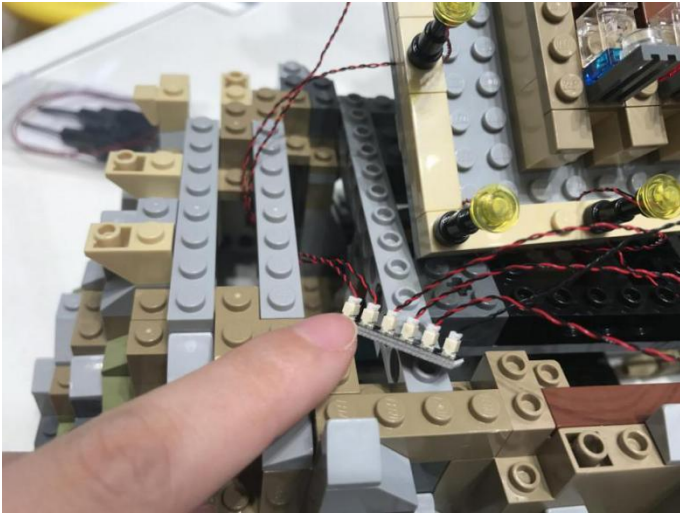
99. Take a 15cm cable and connect it to one of 6-port expansion boards.



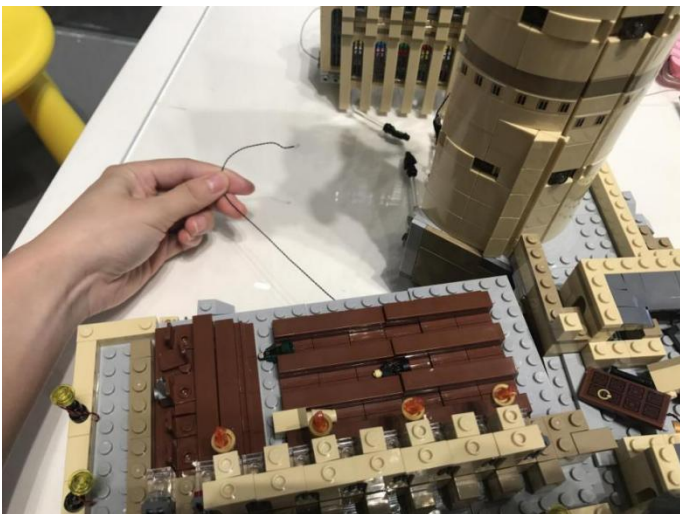
100. Plug the other end of the 15cm cable through the gap in the left side of the 8-port expansion board and connect it to the board.



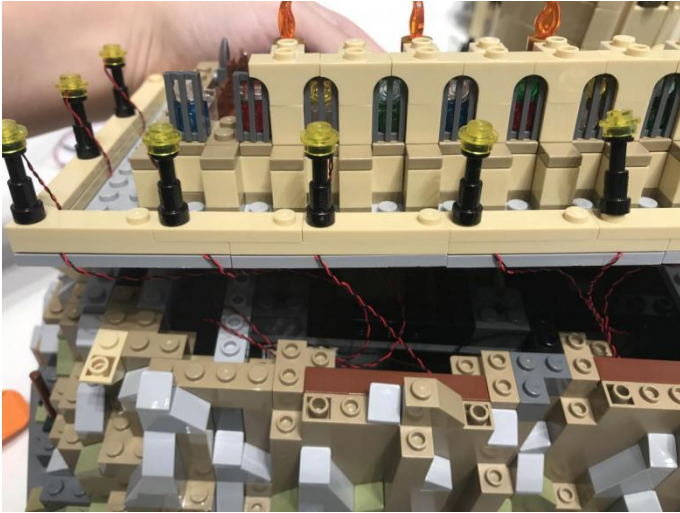
101. Pass the two street light plug ends on the left side under the gray base board, connect to the 6-port expansion board, and connect the remaining street lights to the 6- or 8-port expansion board.



102. Pull the 30cm cable from the 8-port expansion board from the first level of the "snake hole".



103.Hide all the cables and boards from the streetlights in the gap under the base plate. Note: Try to place the cable between the stud gaps, otherwise there will be a big gap when the bottom plate is installed back.



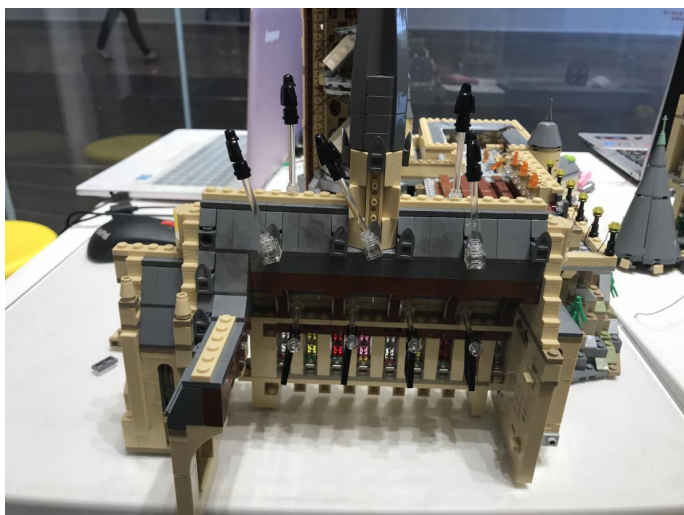
104.Reconnect the bottom plate, now the street lights are installed.



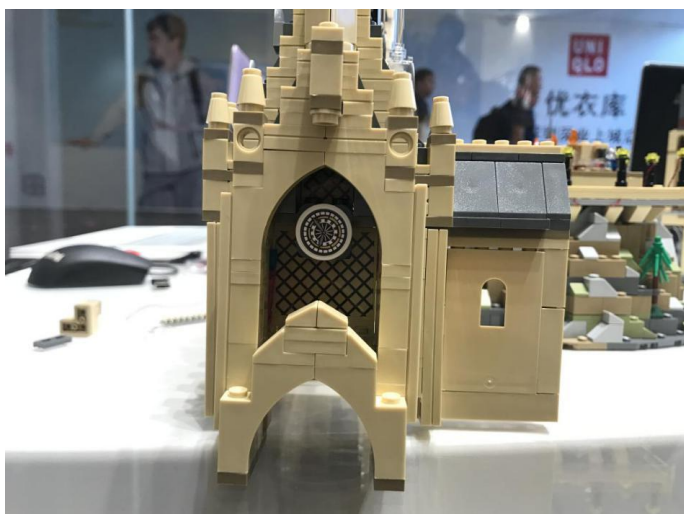
105.Reconnect the cabin floor



106.Now we are going to install the house lighting that was removed in the front step.



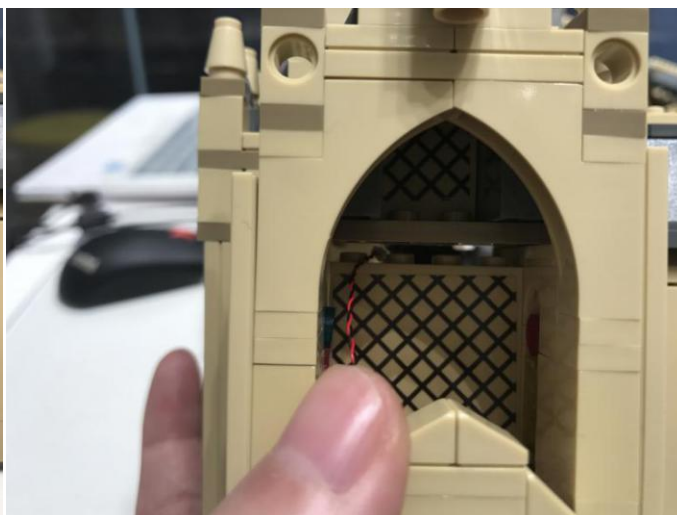
107.Let' s start with the side cabin



108. Take off the "wall clock" in the cabin, take a 15cm warm white light dot, and a 1X2 transparent base plate.



109. Loosen the background plate in the cabin and pass the light dot plug end through the gap.



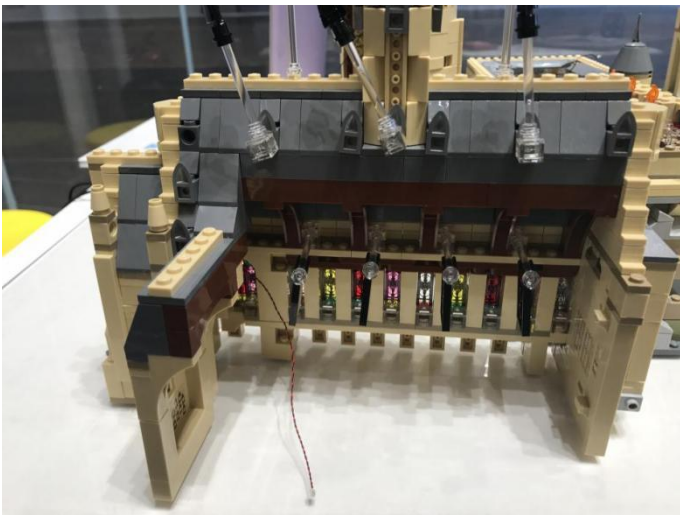
110. Pull to the end of the dot, fixed with 1*2 transparent plate



111. Install back the "wall clock"



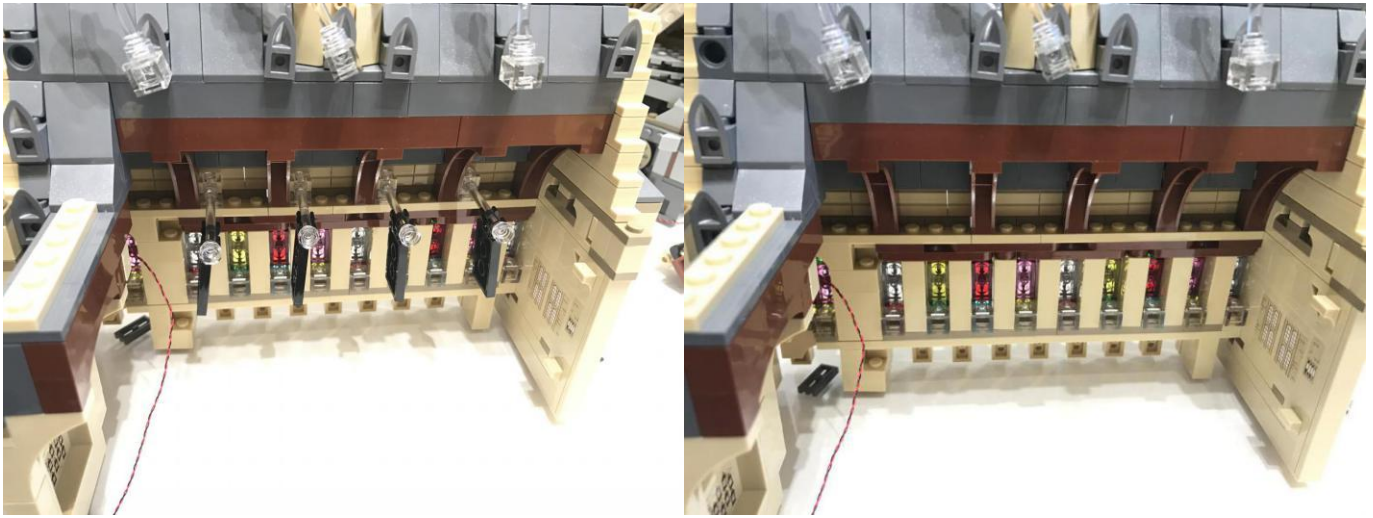
112. We turn back indoors and start to install the interior lights.



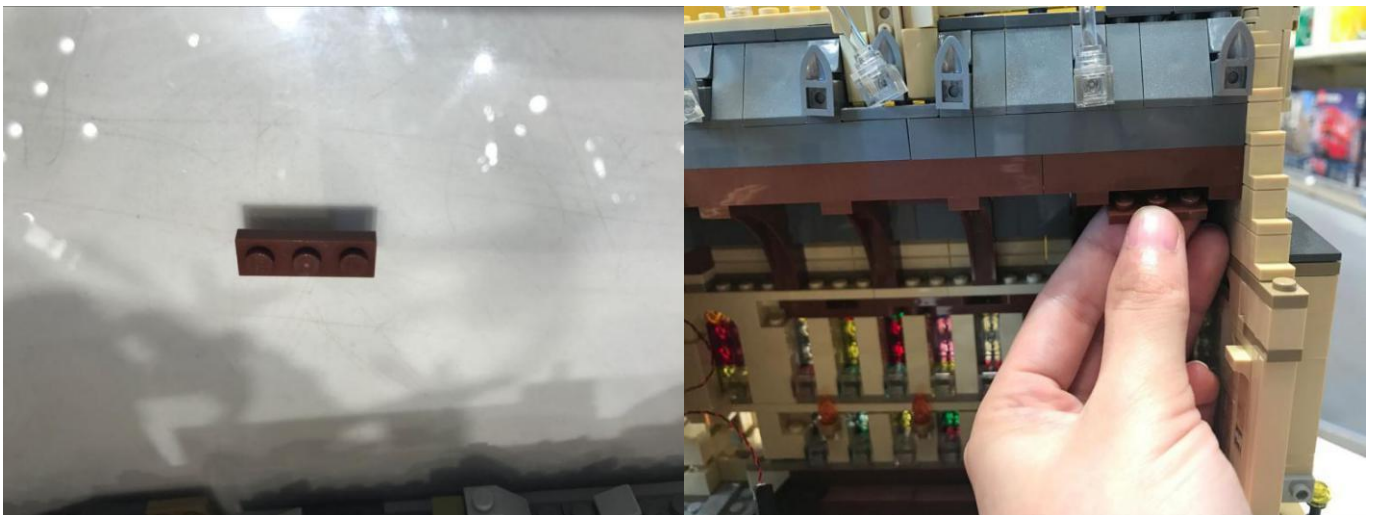
113. Take two warm white strip lights, one 50cm connecting cable and one 5cm connecting cable, as shown below.



114. Remove the "flag" in the room to facilitate the installation of the strip light.



115. Take four 1*3 brown base plates, which are installed in the eaves gap in turn (there is only one brown base plate at hand).



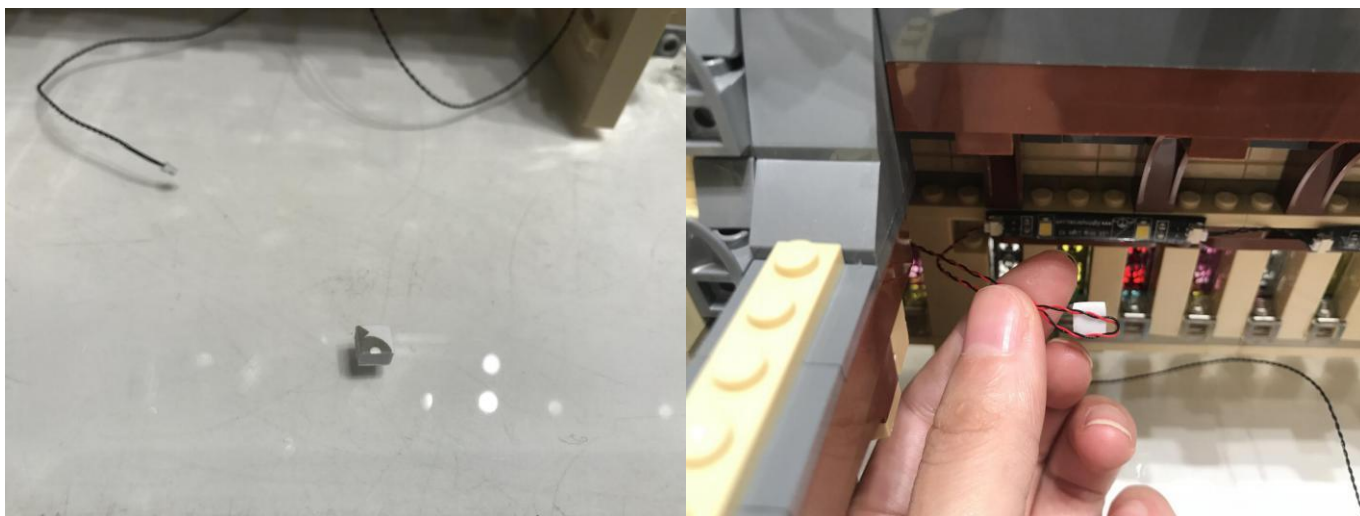
116. Connect the strip light to the 15cm dot light on the left side, and stick the strip light under the installed base plate, as shown below.



117. Press the slack 5cm connecting cable between the strips to the 1*3 base plate stud gap



118. Take an adhesive square and stick the loose cable on the left side to the roof.



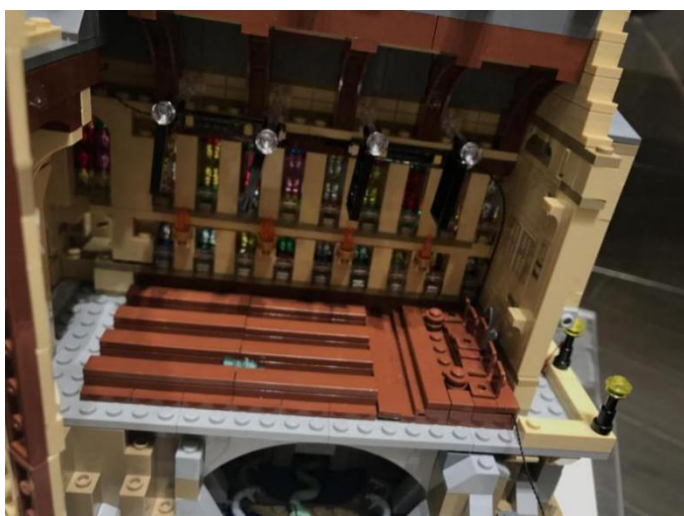
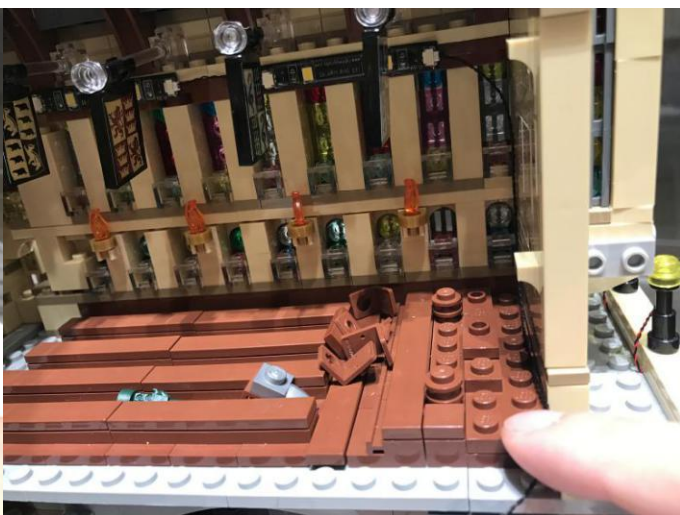
119. Wrap the right 50cm connecting cable between the 1*3 base plate studs and press it under the plate so that the 50cm connecting cable is closer to the right wall when pull down.



120.Reconnect the castle and test all the lights installed.



121.Lift the brown-red base plate, hide the 50cm connecting cable in the stud gap, press it under the plate.



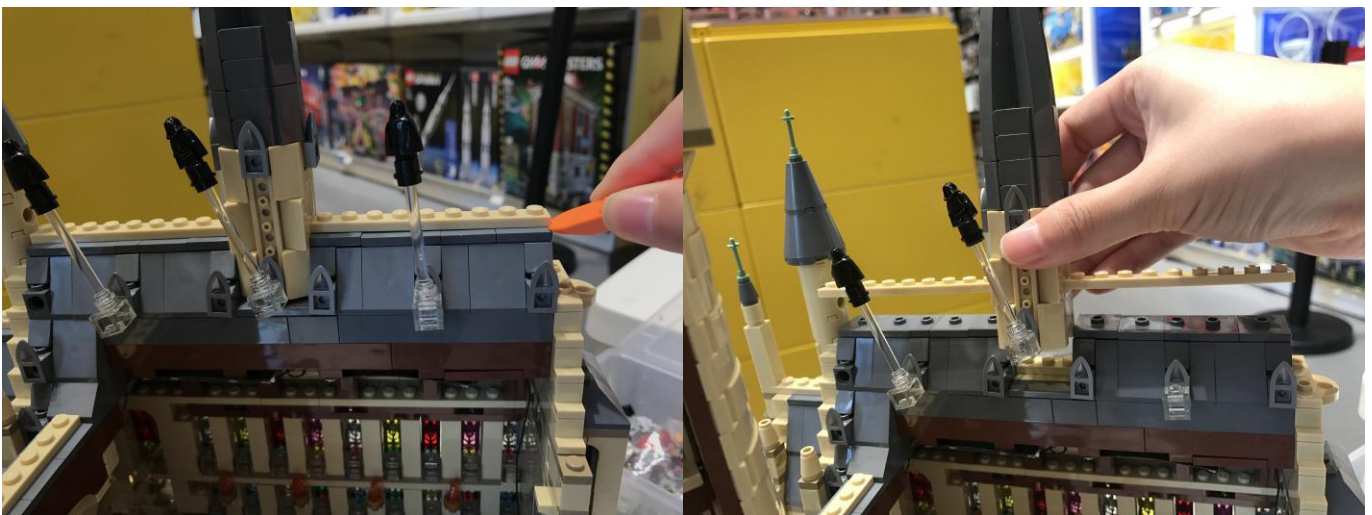
122. Slightly lift the bottom plate, pull the plug end into the bottom, and use the yellow base plate to hide the cable.



123. Then take off the 2 small figures on the roof.



124. Then remove the roof of the tower, as shown below



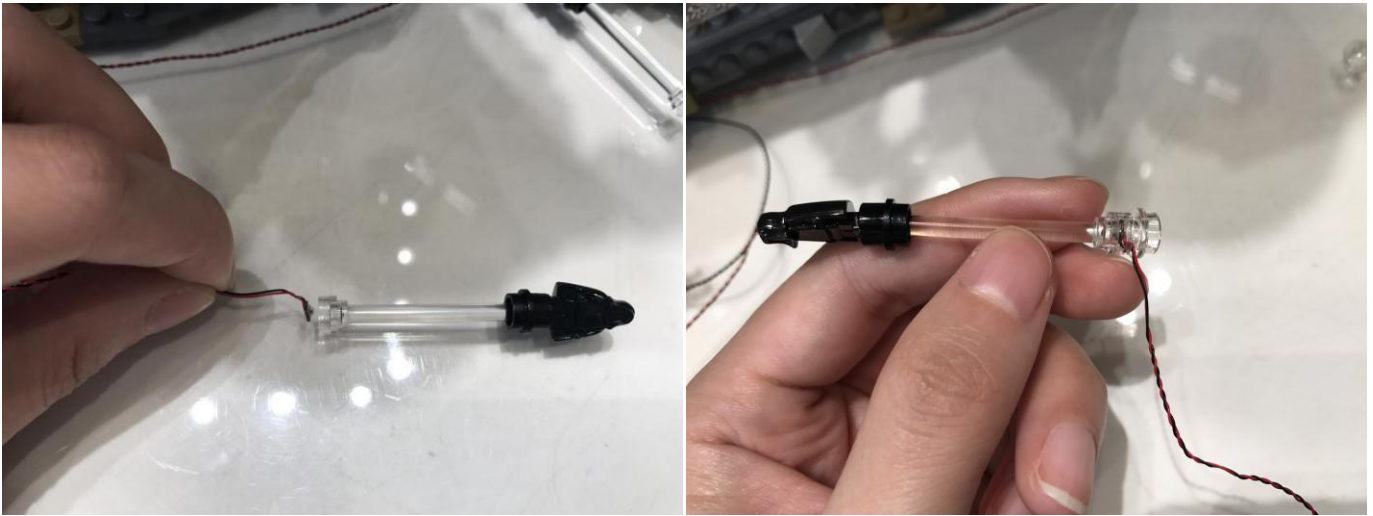
125



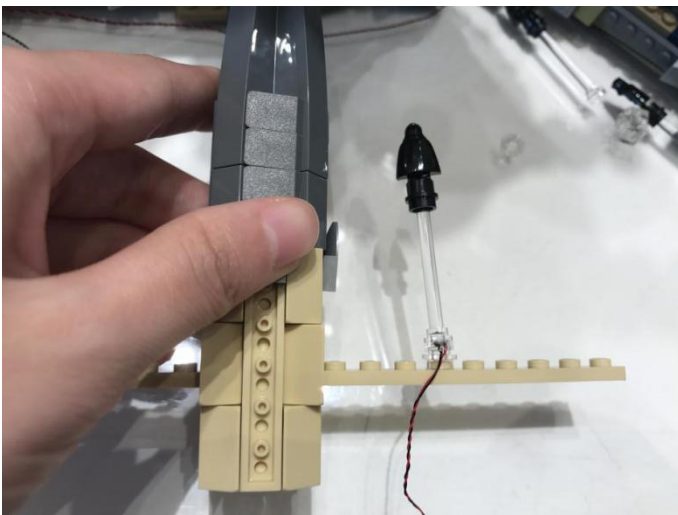
126. Take one 15cm multi-coloured flashing light, one 30cm multi-coloured flashing light and two 1*1 transparent small round plates.



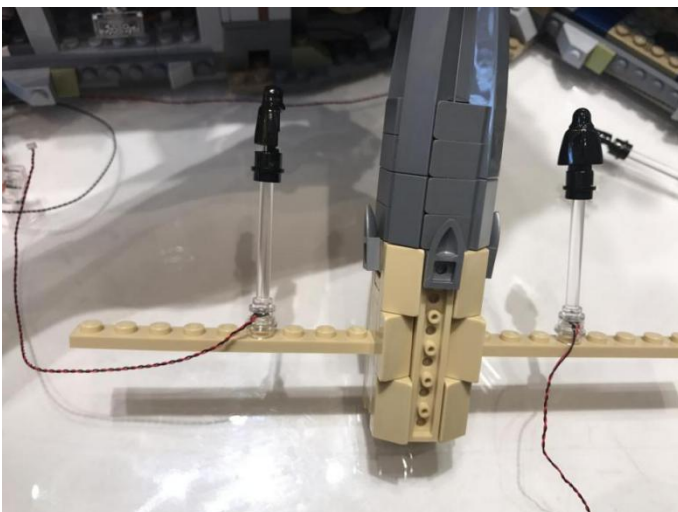
127. The light-emitting surface is oriented toward the small figure, and is fixed to the base with a transparent small round plate.



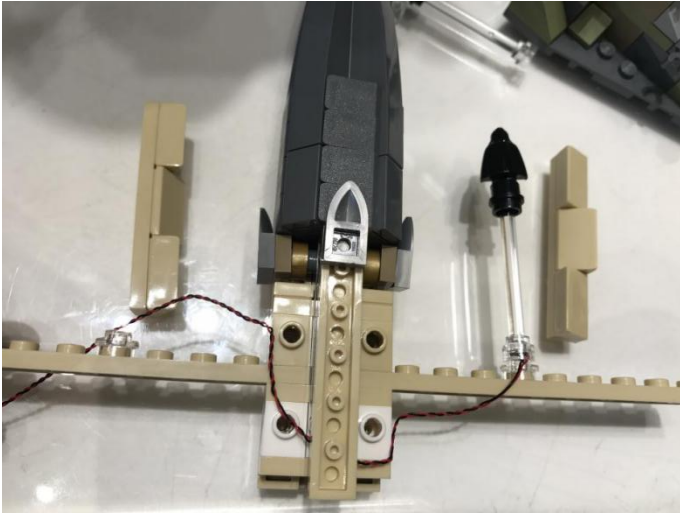
128. Installed on the right side of the original position



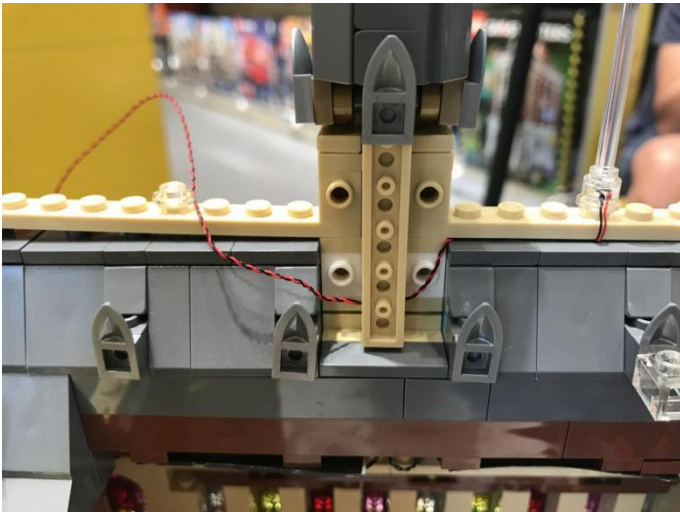
129. Install another 15cm multi-coloured flashing light.



130. Remove the blocks on the left and right sides of the roof.



131. The 30cm multi-coloured flashing light cable is pressed on the base plate stud gap to hide.



132. Reconnect the left and right base plates, and keep the cable hidden under the base plate on the left side.



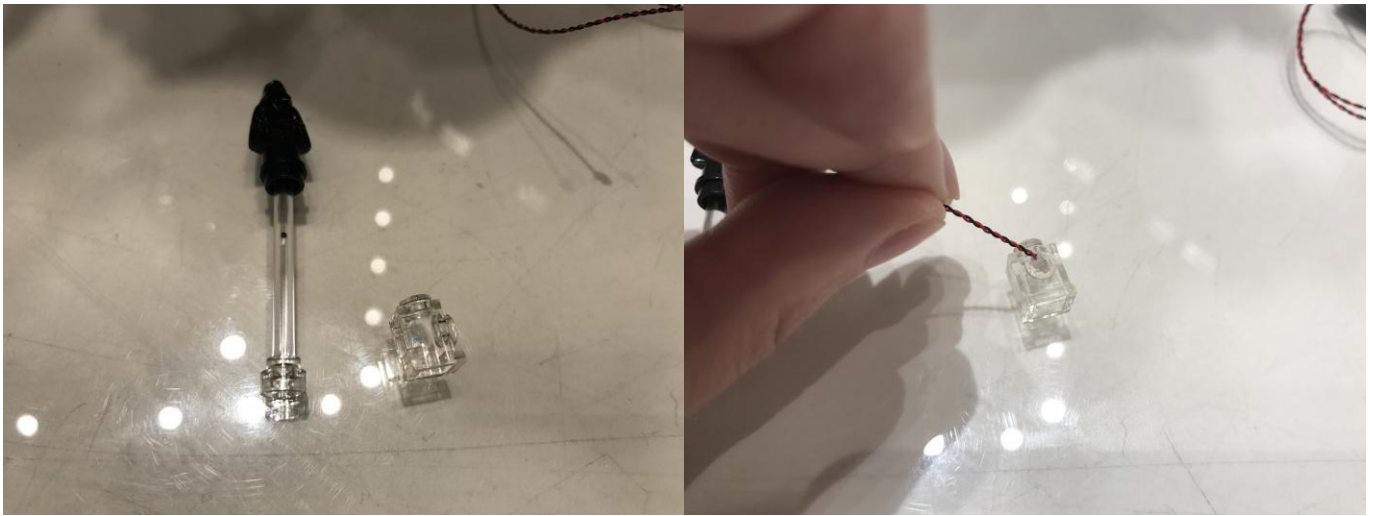
133.Screw two cables to one on the left.



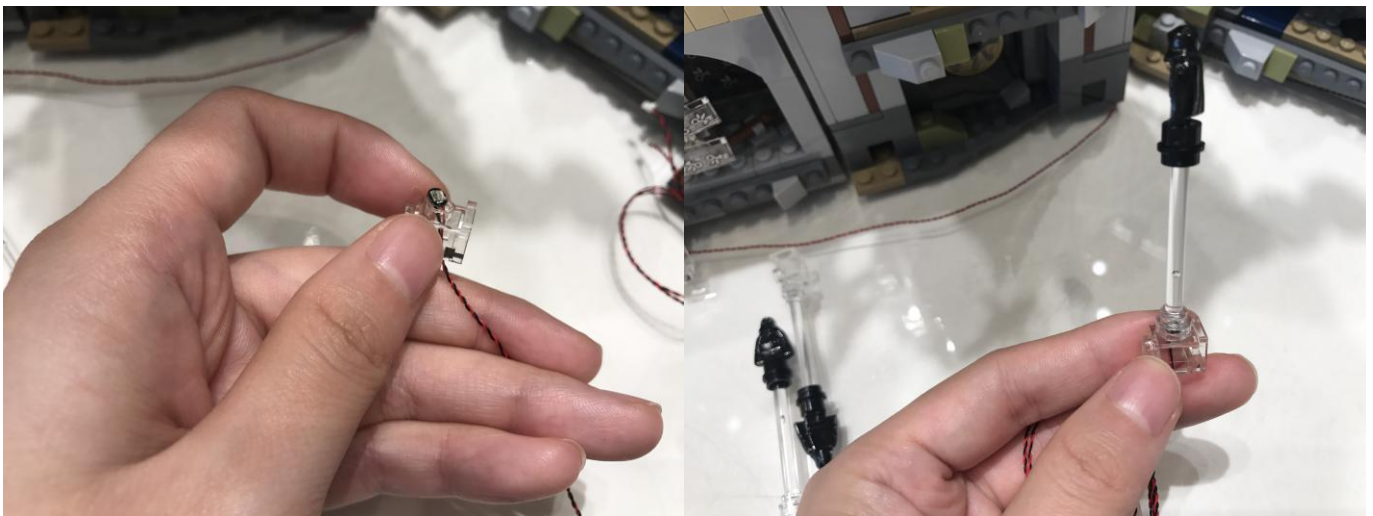
134.Continue to take off the little man of the next floor. Take a 30cm multi-coloured flashing light and two 15cm multi-coloured flashing lights.



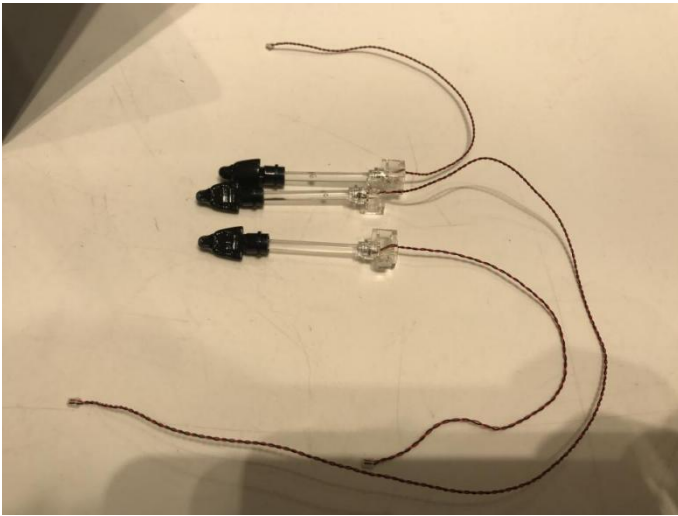
135. Separate the transparent piece at the lower end of the small figure, take 30cm colorful slow flashing dot lights, and pass the plug end from the round hole through the transparent piece.



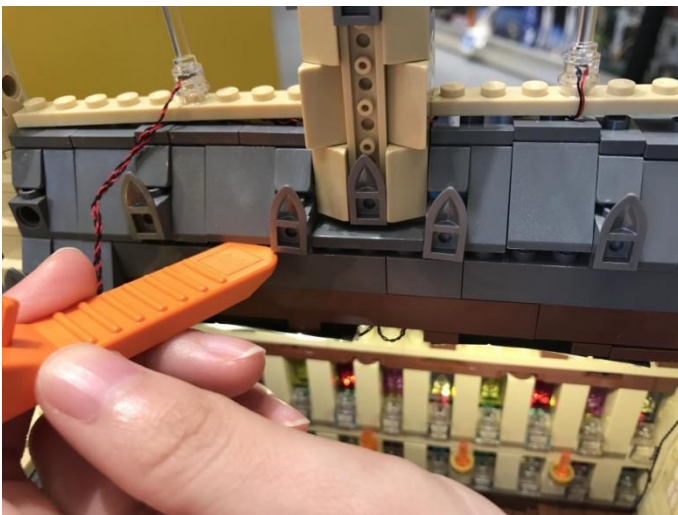
136. Pull the light-emitting side up, and hold it with the bottom of the small figure.



137.Repeat the operation and install another two 15cm flashing lights.



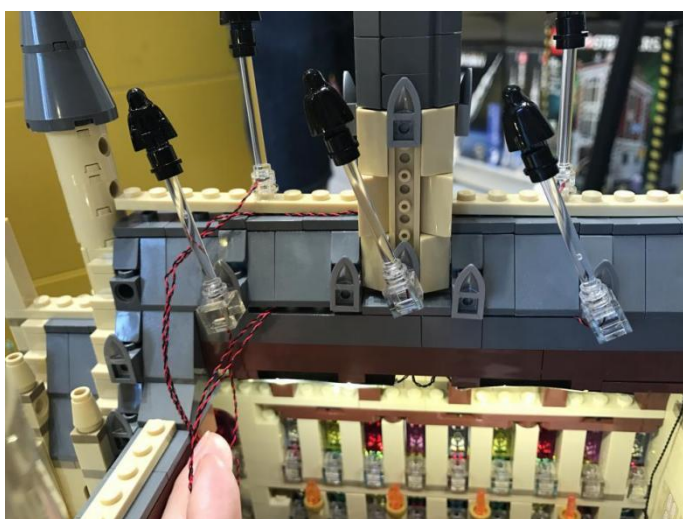
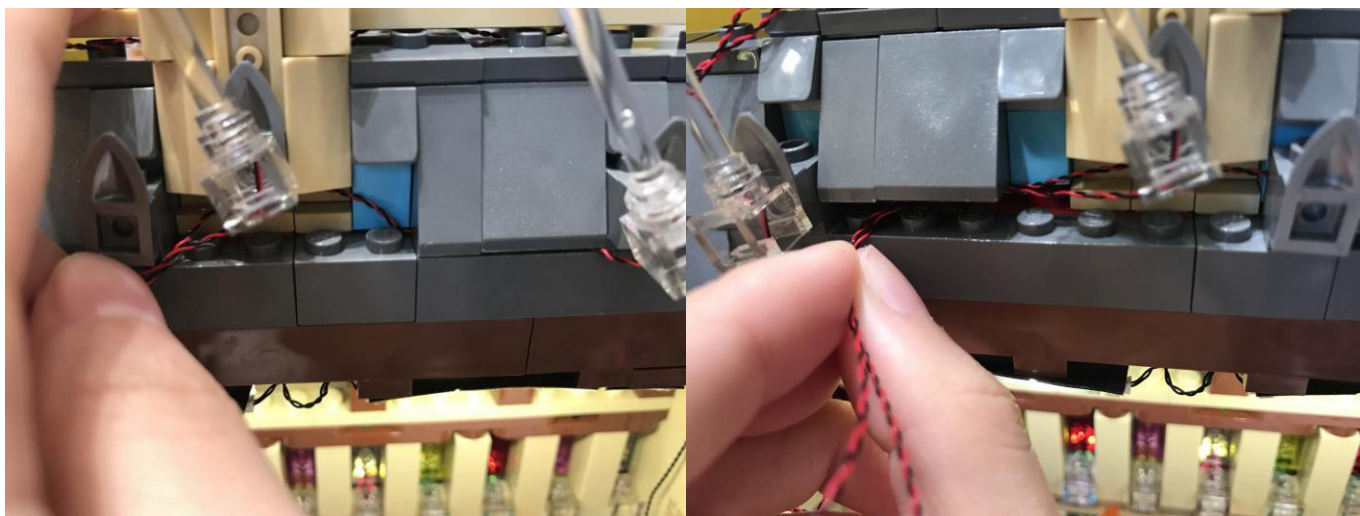
138.Slightly lift a row of gray blocks as shown below.



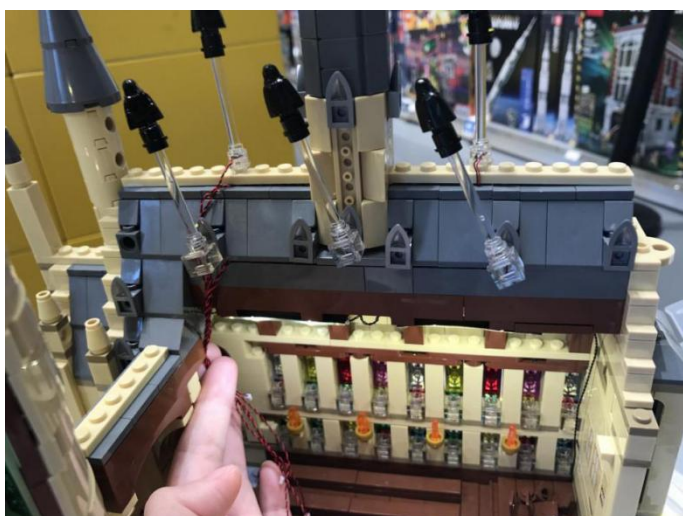
139.Reconnect 3 small figure, and install the small figure with 30cm colorful lights on the right side.



140. Press the flashing light cables from right to left in the stud gap under the gray pieces.



141. Screw the three cables into one on the left side.



142. Take an 8-port expansion board and connect the plug end of the dot light to the board.



143. You can connect to the power and see the effect.



144. Remove 4 flags



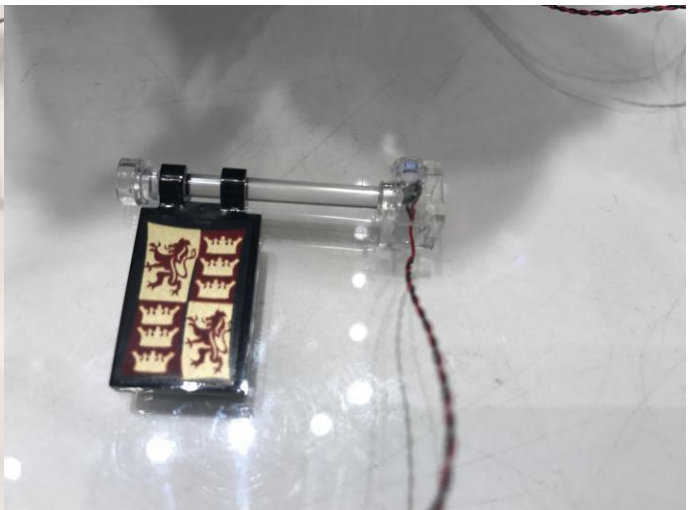
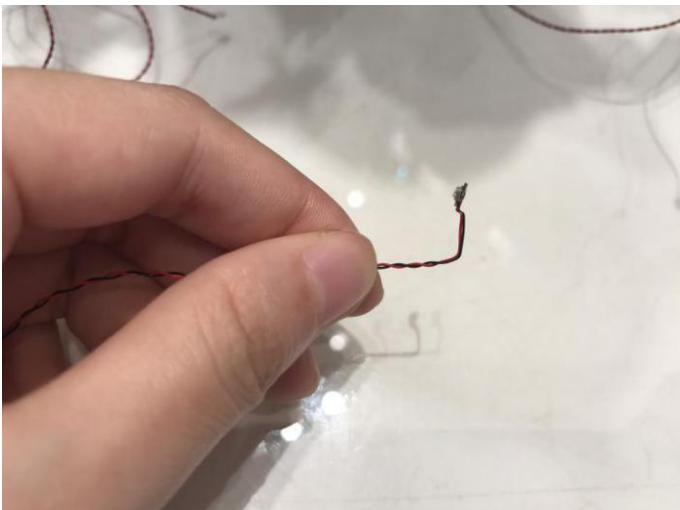
145.Slightly lift a row of base plates under the flags.



146.Take one 30cm and three 15cm flashing lights.



147.Take a 30cm dot light, fold light end into 90 degrees, insert the transparent part at the bottom of the flag, and let the light surface face the flag column.



148. Install the flag on the far right and the dot light is fixed.



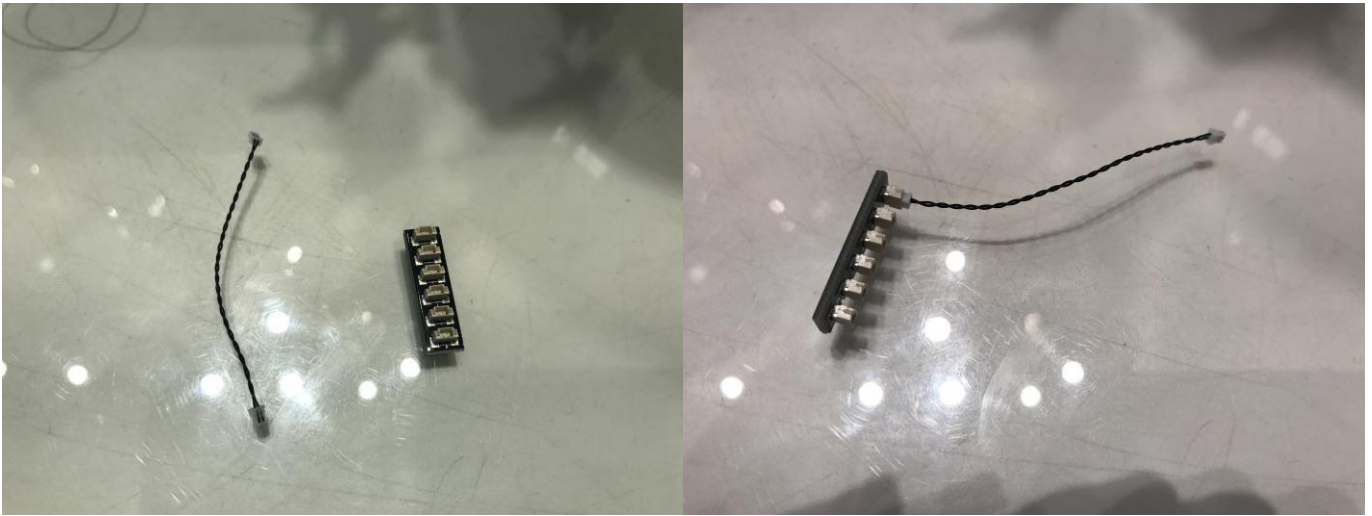
149. Also install other dot lights.



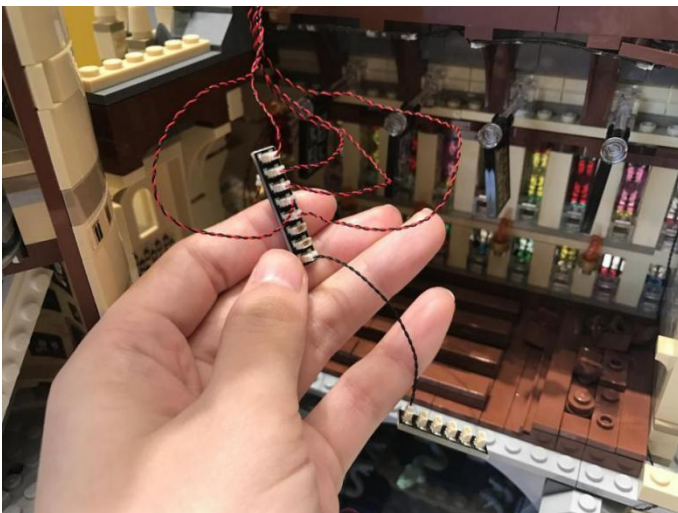
150. Also hide the cable from right to left in the stud gap under the base plate.



151. Take a 6-port expansion board and a 5cm cable, then connect them.



152. Connect the other end of the 5cm cable to the 8-port expansion board.



153. Now we take three warm white strip lights, three 1*6 gray base plates, two 5cm connecting cables and one 15cm connecting cable.



154. Stick the strip light on the base plate and connect it with a 5cm cable.



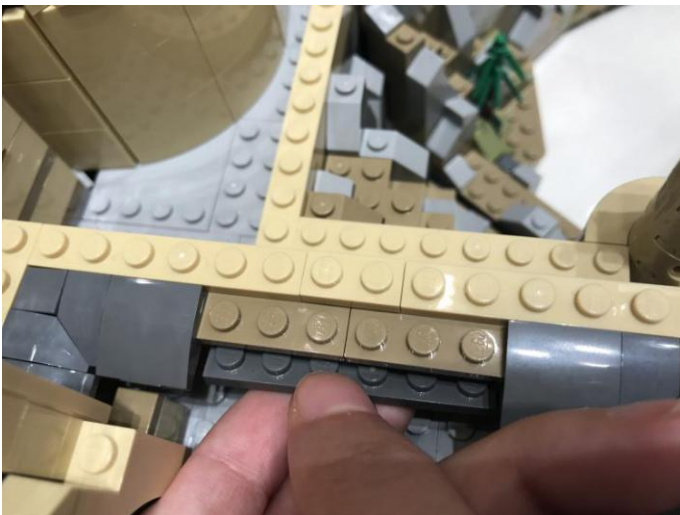
155. Now let's install the lights in the side of the yard.



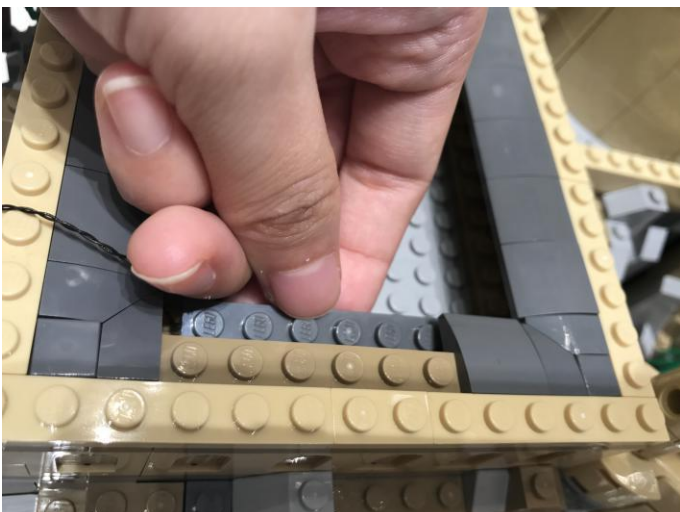
156.Remove the gray pieces.



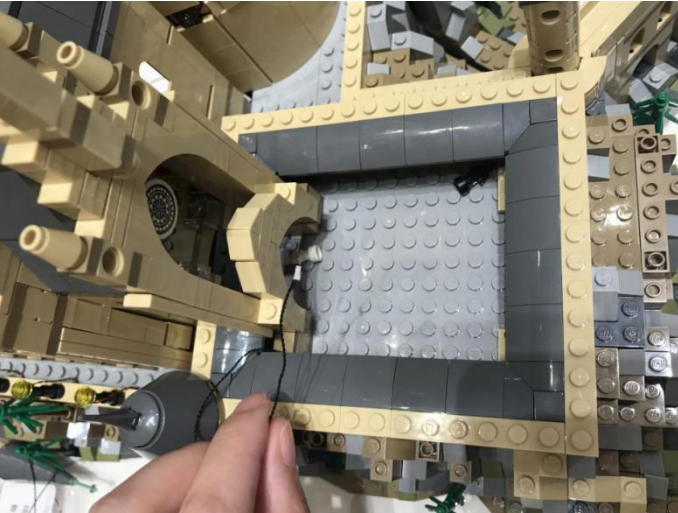
157.Install the first strip light under the brown plate.



158.Repeat the operation to install the second and third strip light in sequence.



159. Pull out the 15cm cable from the left side.



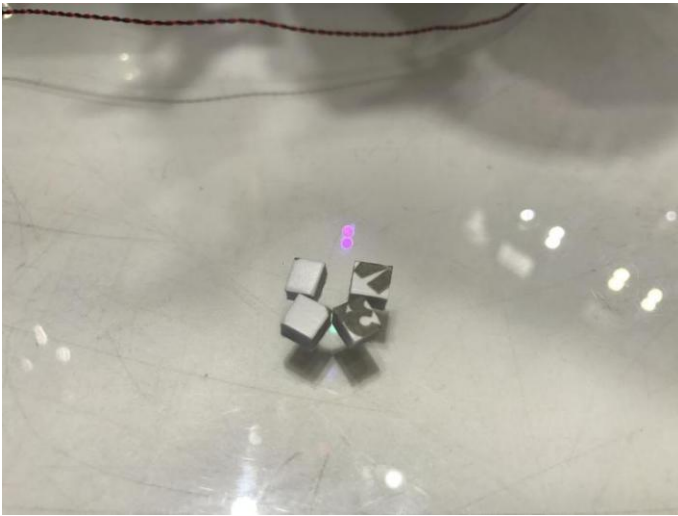
160. Pass the 15cm cable through the gap at the bottom of the cabin.



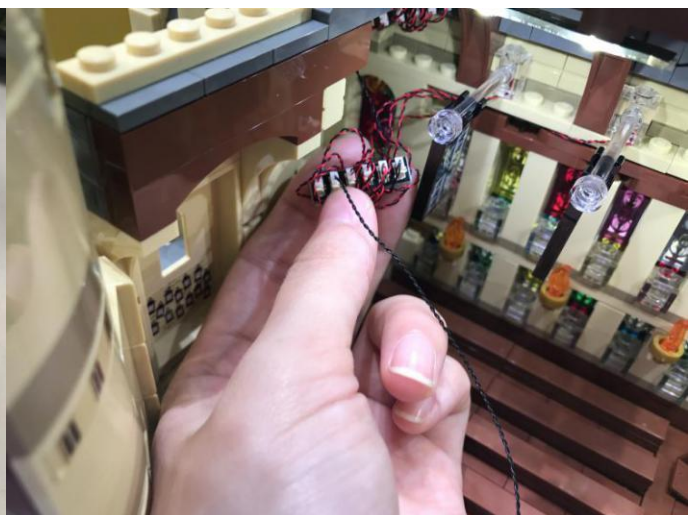
161. Pull the 15cm cable from the side where the flashing light has just been installed.



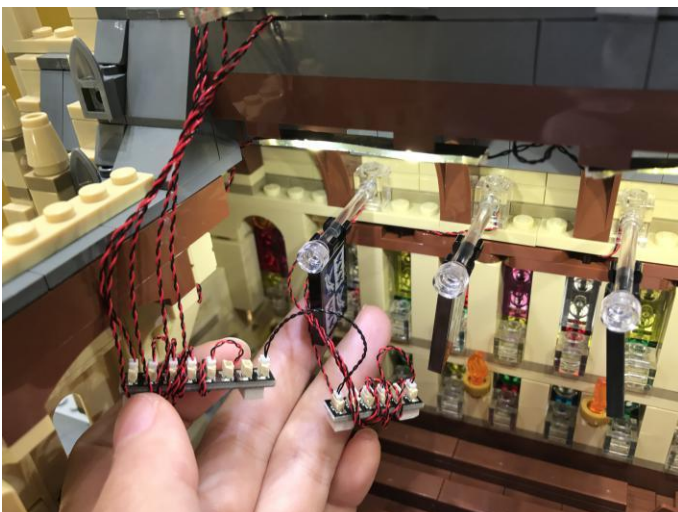
162. Take 4 adhesive squares and stick them on the each side of the two expansion boards.



163. Take a 30cm cable and connect it to the board.



164. Wrap the wire around the board, connect the plug end of all the dot lights, and stick the expansion board to the left roof to hide it.



165. Connect the power to see the effect!



166. Take a gray 1*2 base plate to secure the 30cm cable for easy hiding of the cable behind the wall and the edge of the wall.



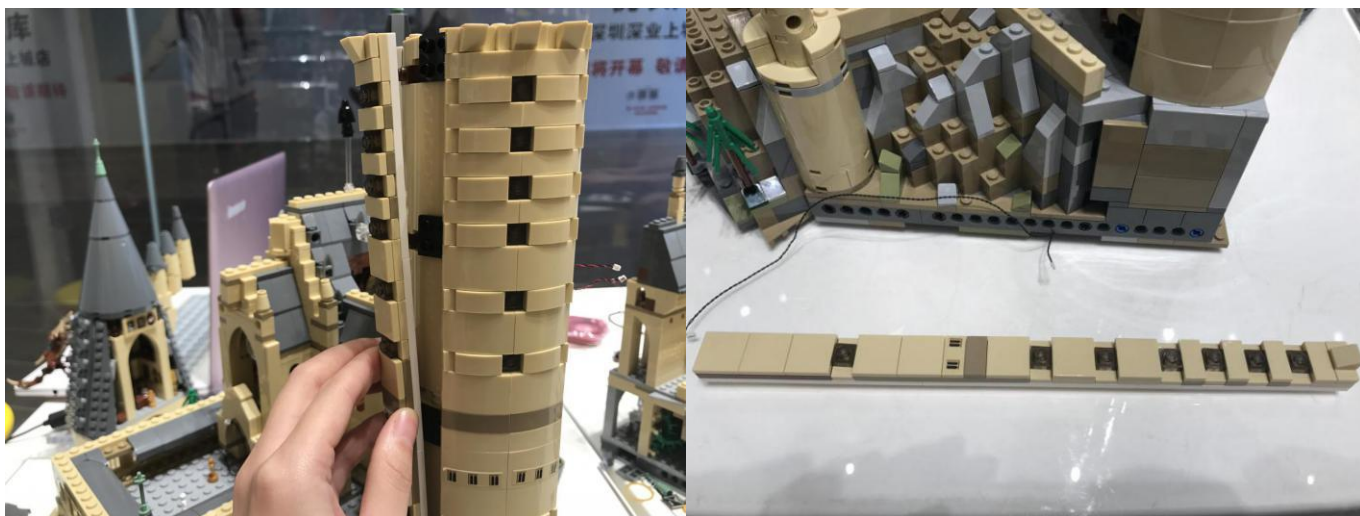
167. Then we start to install the lights on this tower.



168. Remove the top of the first floor and set it aside. Then remove the wall plates of the tower.



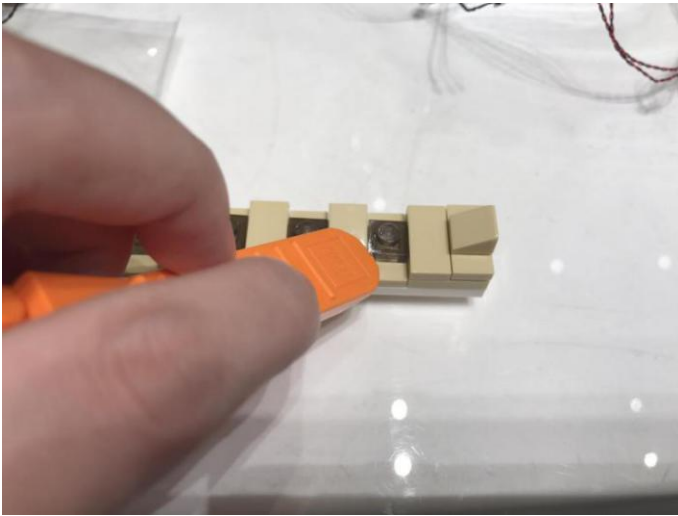
169. Remove the long strips of the gray transparent pieces as shown below.



170. Take three 15cm warm white dot lights and two 30cm warm white dot lights.



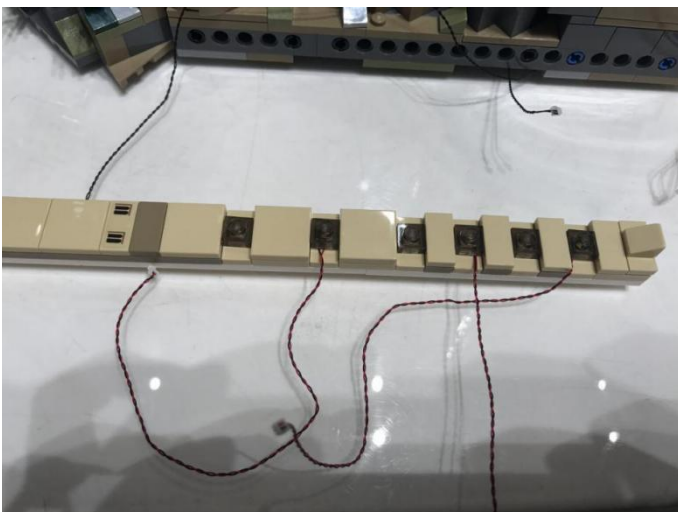
171. Remove the first gray transparent piece, take a 15cm dot light, and use the transparent plate to fix the light.



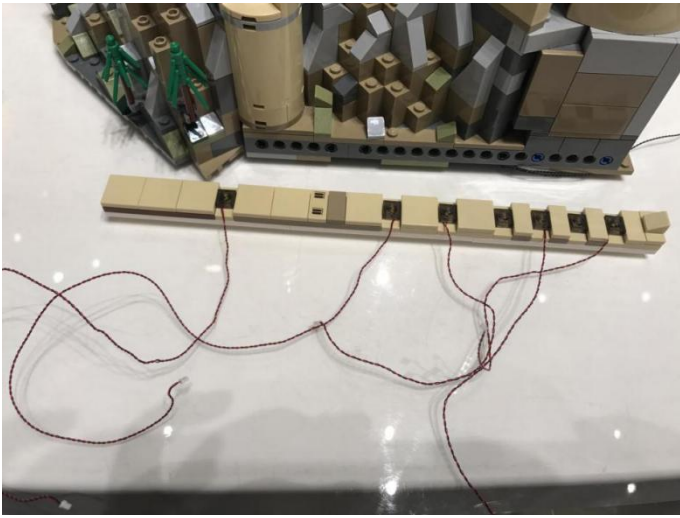
172



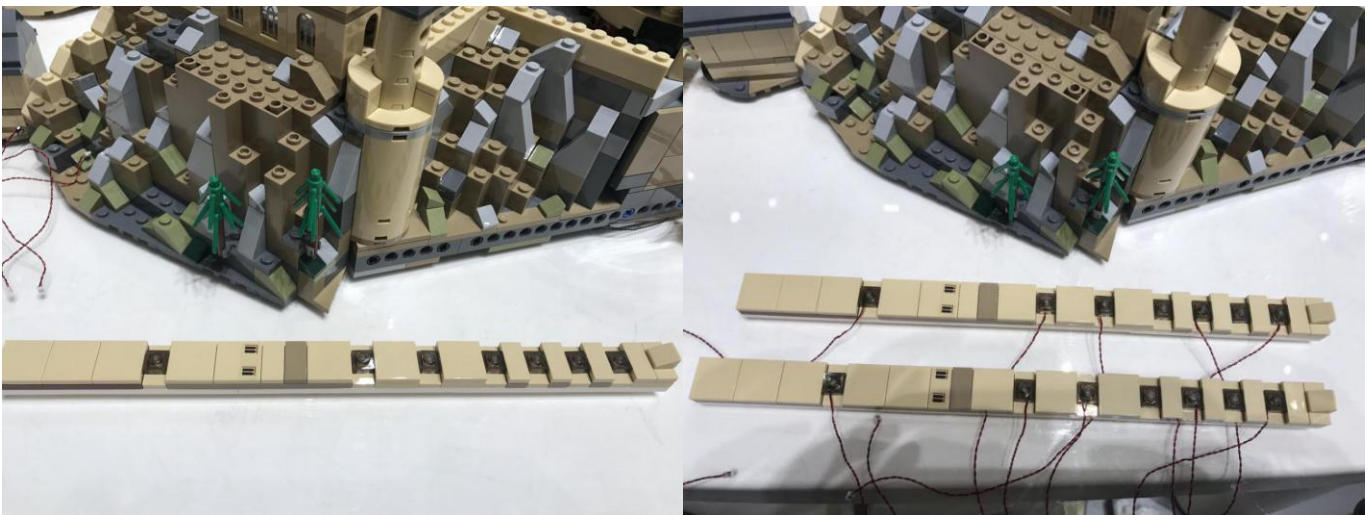
173. Repeat the operation, install another two 15cm dot lights with a gray transparent piece.



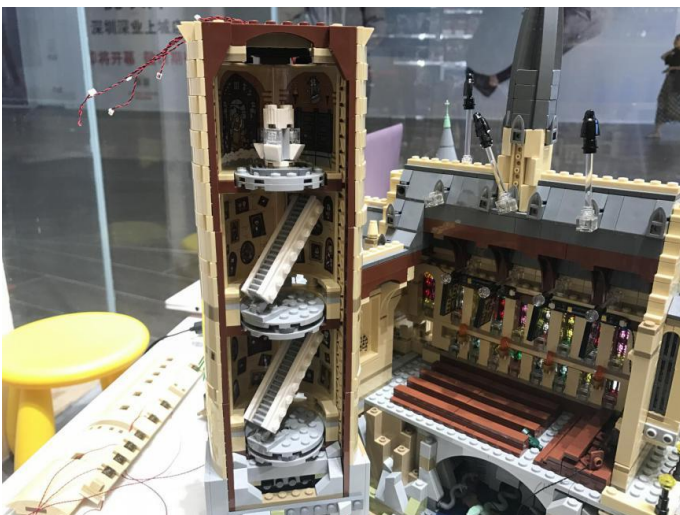
174. Then install the following 2 gray transparent pieces to install two 30cm dot lights as shown below.



175. Take the same strip, and install three 15cm warm white dot lights and two 30cm warm white dot lights.



176. Now let's install the lights in the tower first.



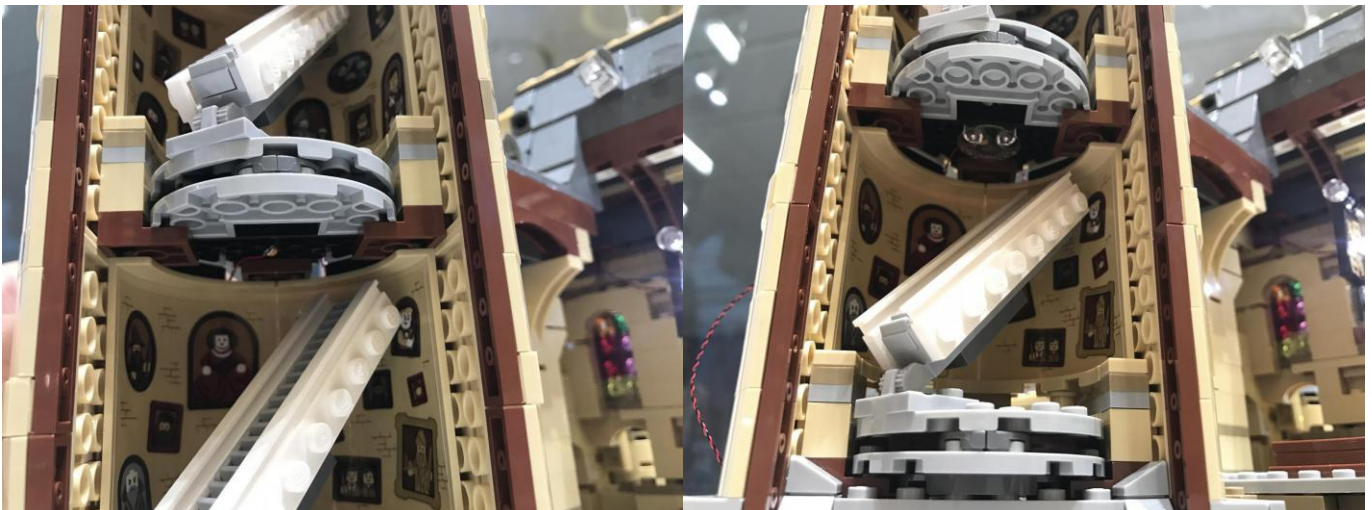
177. Take one 30cm pink dot light and one 2*2 round plate.



178. Install the dot light on the first floor with stairs, pull the plug end through the roof gap, leaving only the light end.



179. Fix the dot light with 2*2 transparent round plate with the lighting side facing down.



180. Connect the power to see the effect.



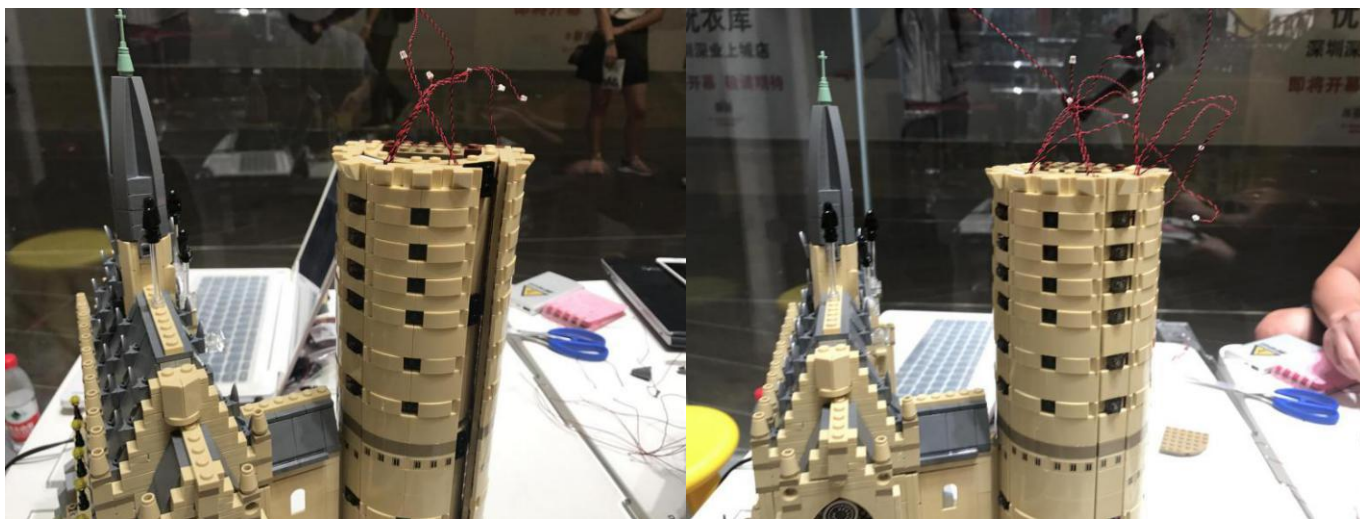
181. The second floor is installed with 15cm green dot lights, and the third floor is installed with 15cm blue dot lights.



182. Now install the long board on the outside of the tower and screw all the cables up from side.



183.Reconnect three long plates and hide the cables under the plates.



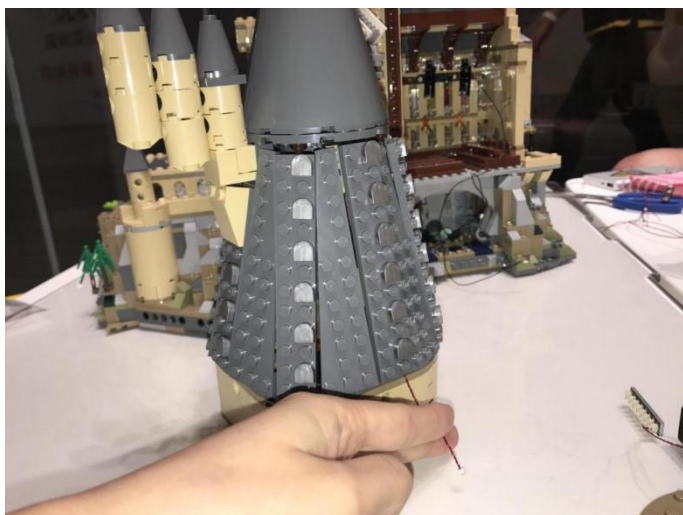
184.Now let' s install the top of the tower.



185.Take one 15cm red dot light and one 2*2 round plate. Install them on the roof as shown blew.



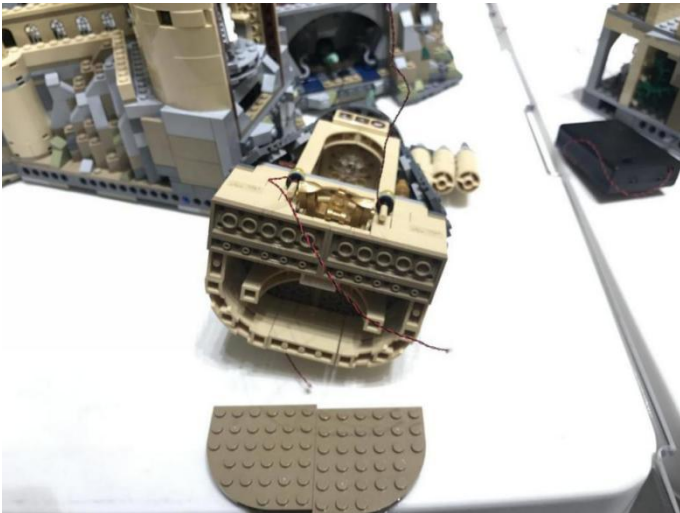
186. Pull the plug end out of the back of the tower.



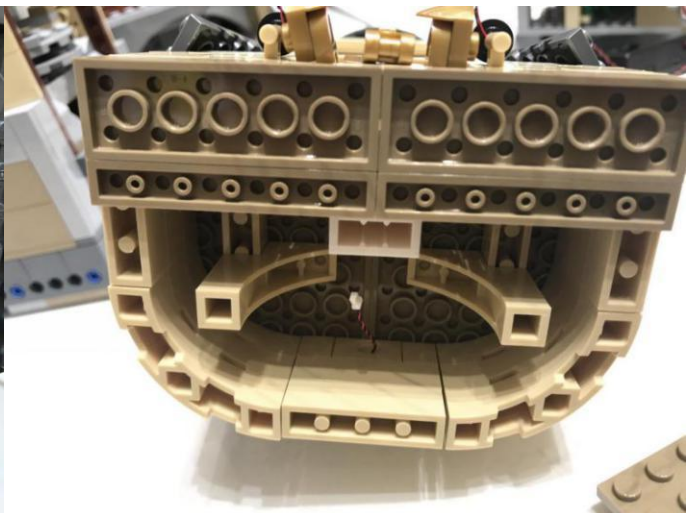
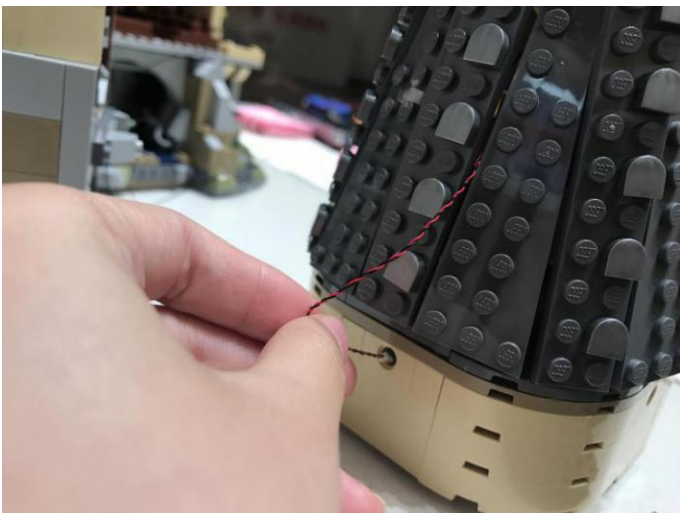
187. Repeat previous operation, take two 15cm warm white dot lights, two black small round plates with holes, and install two torches on the top of the tower (also replaced by small gray plate with small holes).



188. Place the tower roof on the side and remove the two base plates.



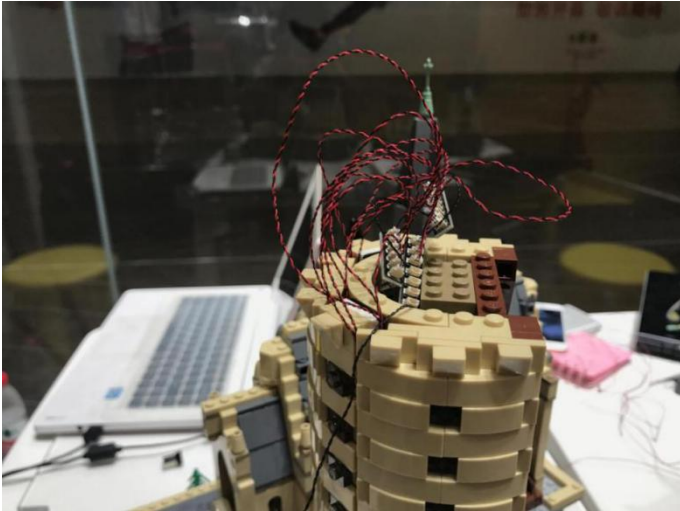
189. Pass the plug end behind the tower from the round hole to the bottom of the tower.



190. Take two 8-port expansion board, one 6-port expansion board, two 5cm cables and one 50cm cable, as shown below.



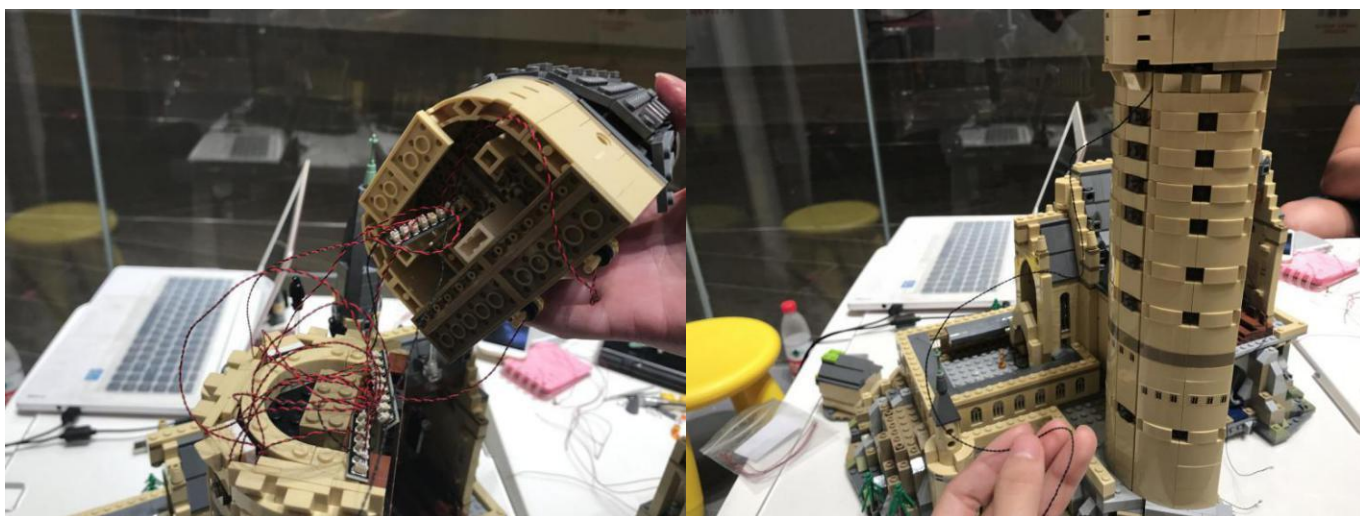
191. Connect all lights to the three boards.



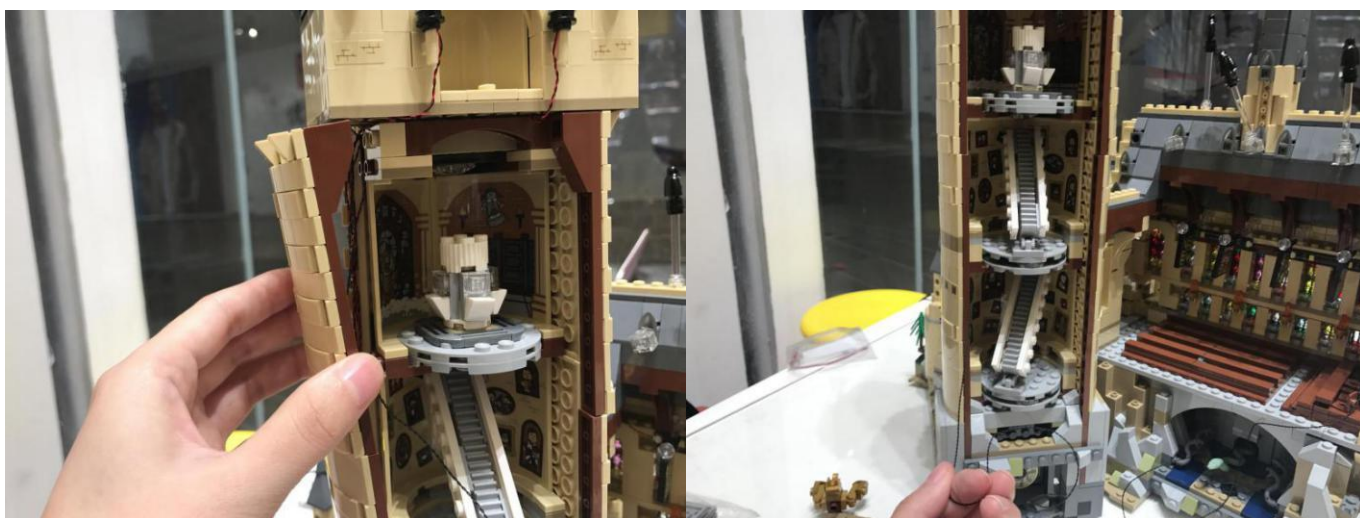
192. Take a 2*6 base plate and install it behind the bottom of the tower.



193. Connect the 3 plugs on the remaining boards, pull the 50cm cable out, restore the top of the tower, and hide all the boards and cables in the gap.



194. Hide the 50cm cable in the long board and pull it to the bottom of the tower.



195. Now all the lights on the tower are installed, let's see the effect!



196. Then remove the gray piece on the left side of the first floor, as shown below.



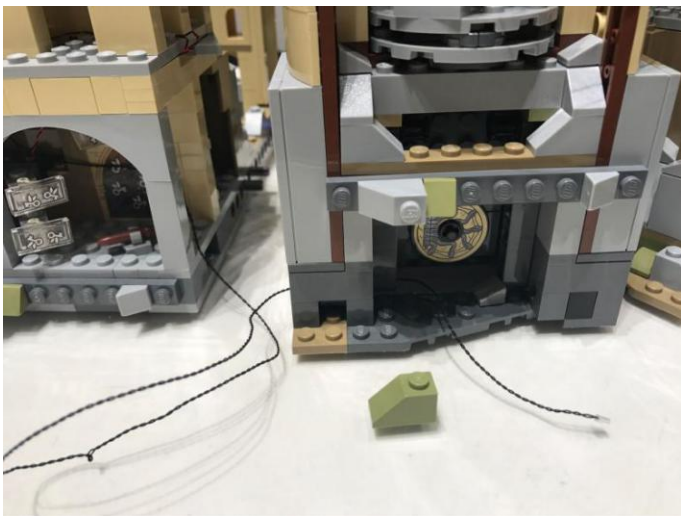
197. Pull the plug end through the gap and pull it out from the bottom.



198.Reconnect the gray piece and press the cable against the stud gap under the piece.



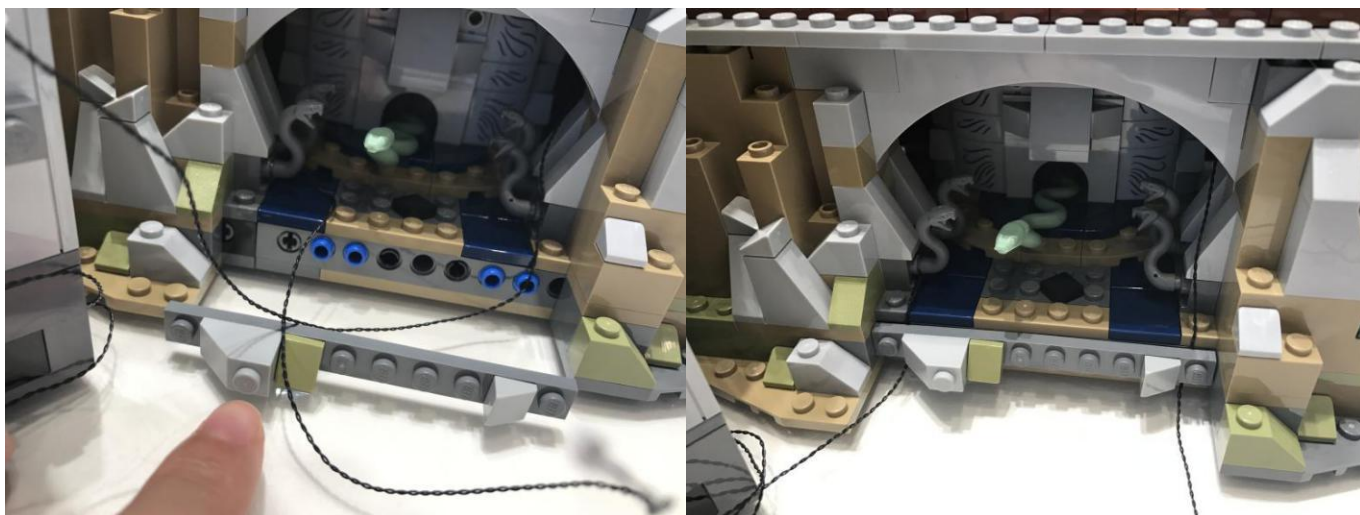
199.Pull the 50cm connecting cable of the first part of the right side through the bottom hole of the second part of the joint, as shown below.



200. Lift the second part slightly, and pass the 50cm connecting cable that passes through the first part and the 50cm connecting cable of the tower together through the bottom of the tower and pull it to the right.



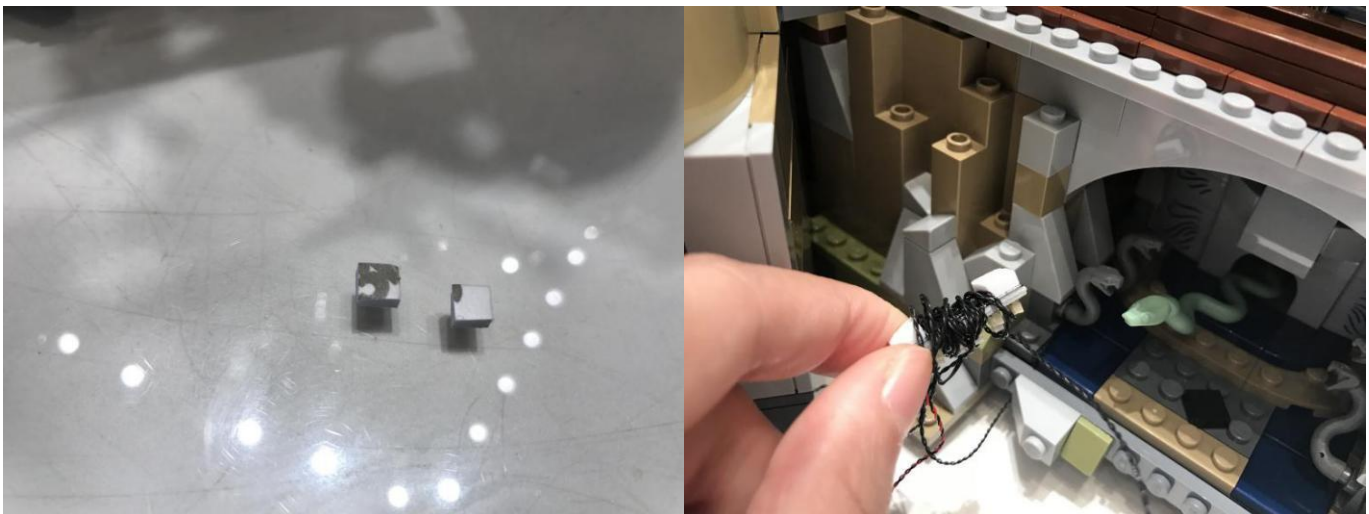
201. Remove the base plate of the "snake house" and press the two connecting cables pulled out from the "snake house" under the plate.



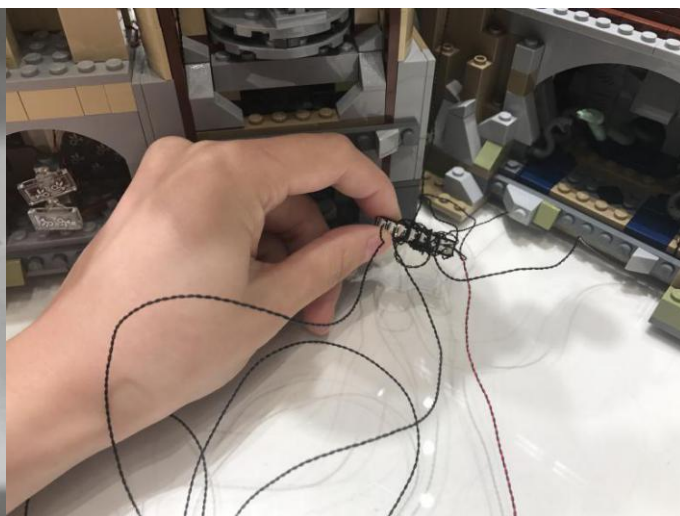
202. Take one USB power cable, one 8-port expansion board, connect as shown below



203. Take 2 adhesive squares and stick them on both ends of the board. Connect the 5 cables to the 8-port expansion board and wrap them around the board.



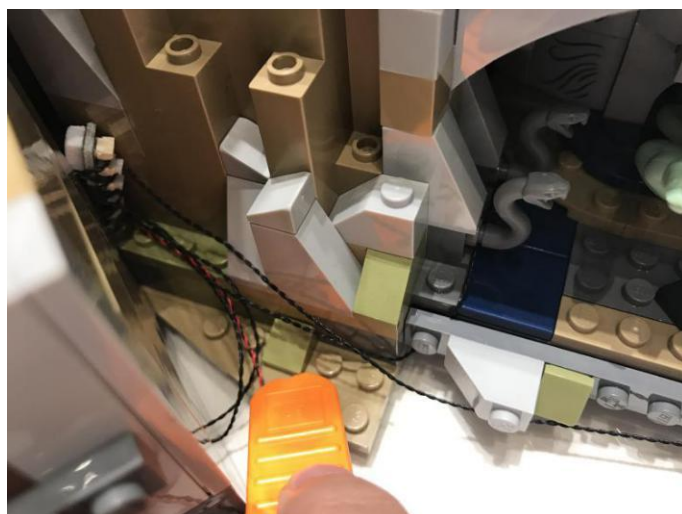
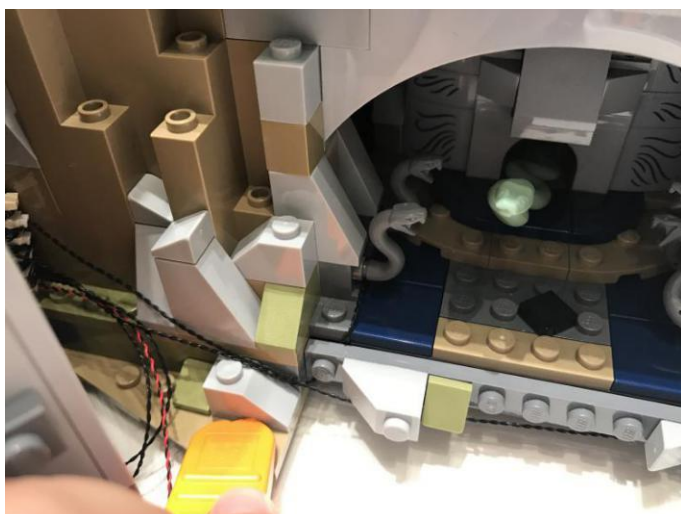
204. Take two 50cm cables and connect them to the 8-port expansion board.



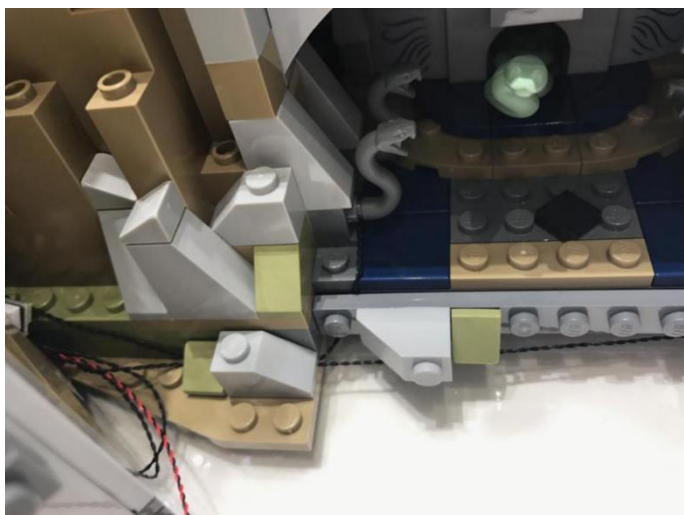
205. Plug the board into the gap.



206. Remove the gray and green pieces as shown below.



207.Hide the line under the pieces and reconnect the pieces.



208.Now that we have installed most of the lights, connect the power and enjoy it!



209.Finally, we install the atmosphere lights! Take the pieces as shown below.



210. Connect as shown below.



211



212



213. Take a Multi-Coloured Strip Light, and stick it on the just installed plate.



214



215. Repeat the operation and install another 2 atmosphere lights.



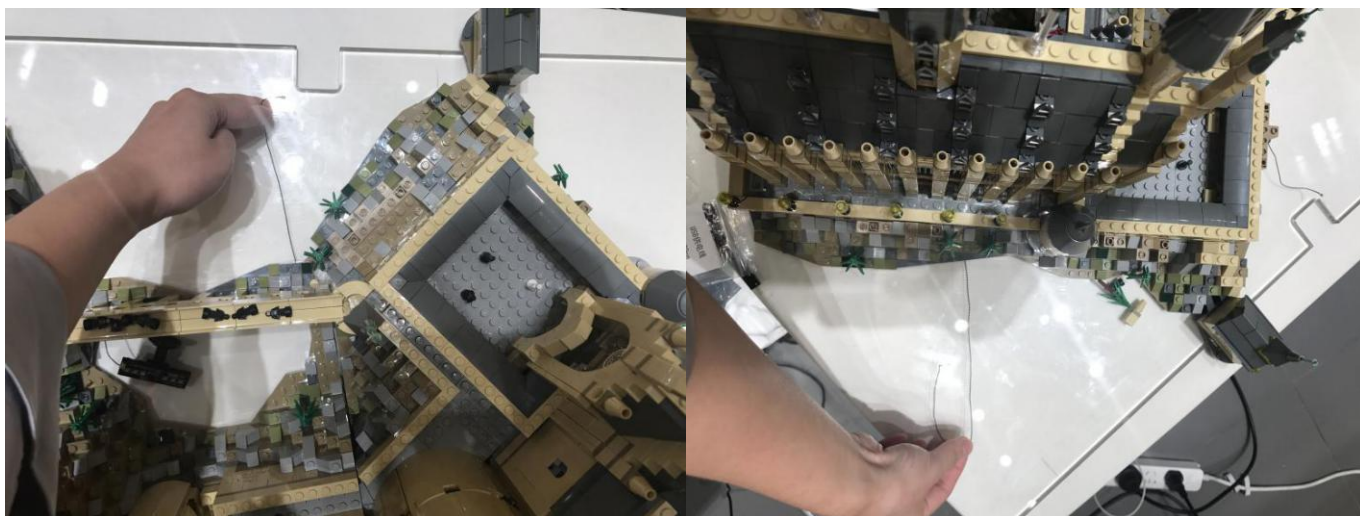
216. Take a 30cm cable and connect it to the 6-port expansion board on the bottom as shown below.



217. Pull it from the bottom to the other side of the castle and connect an atmosphere light



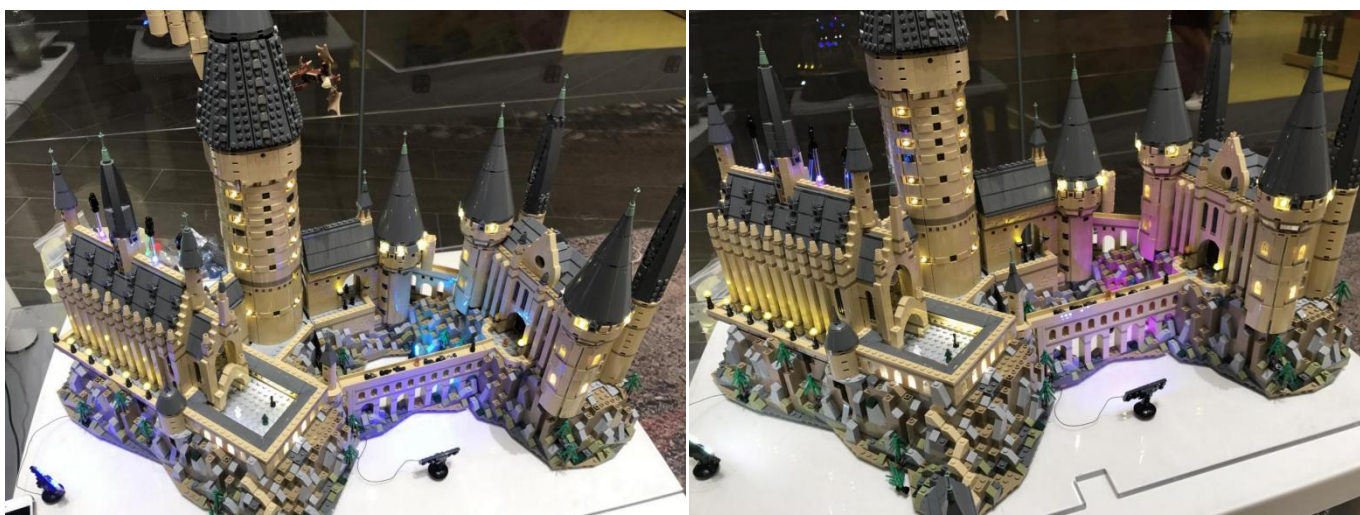
218. Pull the 50cm cable connect previously from the bottom of the castle to the outside of the castle.



219. Connect the atmosphere lights separately and light the castle from the front of the castle in three directions.



220. Finally we complete this kit, enjoy it!



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

