

71016 Kwik-E-Mart P67

- P67 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 “71016 P67”.
- 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 12 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	4
LED Strip Lights-White	LED Strip Lights-White	7
Expansion Board	8 Socket Expansion Board	1
	12 Socket Expansion Board	2
AA Battery Box	AA Battery Box	1
Flat Battery Pack	Flat Battery Pack	1
Connecting Cables-15CM	Connecting Cables-15CM	4
Connecting Cables-30CM	Connecting Cables-30CM	4
Bit Lights-30CM-Warm White	Bit Lights-30CM-Warm White	10
Flashing Bit Lights-30CM-Warm White	Flashing Bit Lights-30CM-Warm White	1
Flashing Bit Lights-30CM-Red	Flashing Bit Lights-30CM-Red	3
Flashing Bit Lights-15CM-Warm White	Flashing Bit Lights-15CM-Warm White	2
Parts package		

Please contact us immediately if there have any missing components.

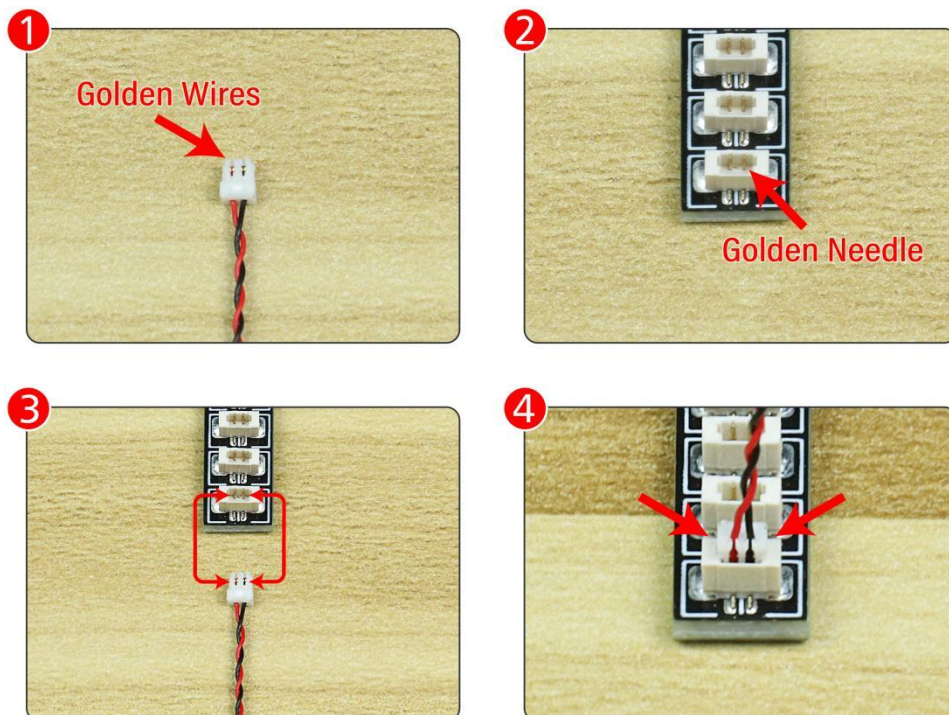
Section B: Test that each components is working properly.

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



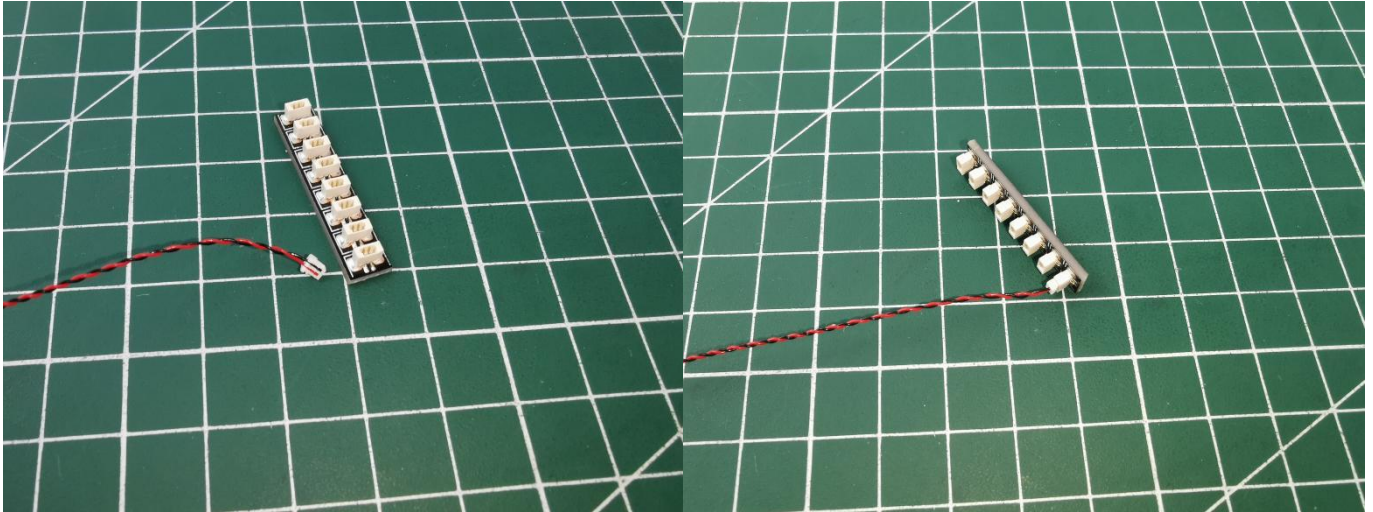
It is worth reminding that our products are all customized. They have a unique way of connecting. The white plug on wire and the socket of the expansion board need to be connected together to transmit power.

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



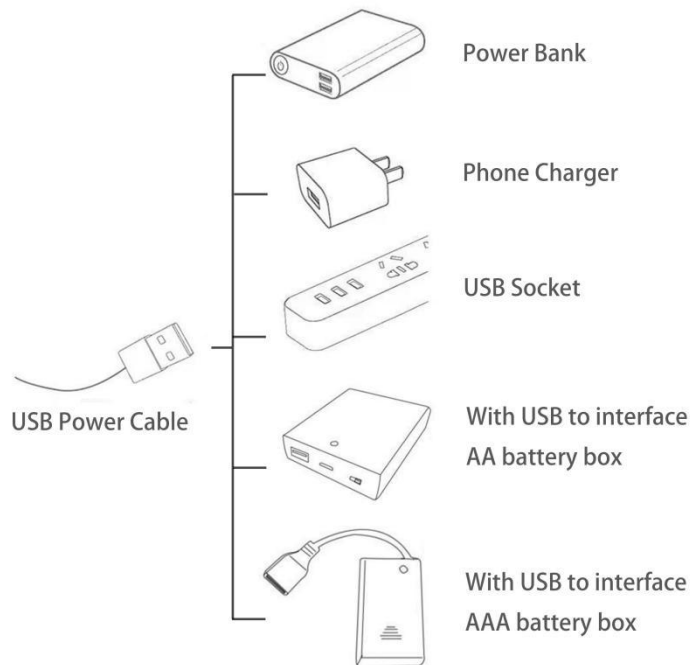
All our connections between plug and socket are all the same as shown above. So for any such structure with plug and socket, please pay attention to the golden wire of the plug and the golden needle of the socket, they must be touched together.

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



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

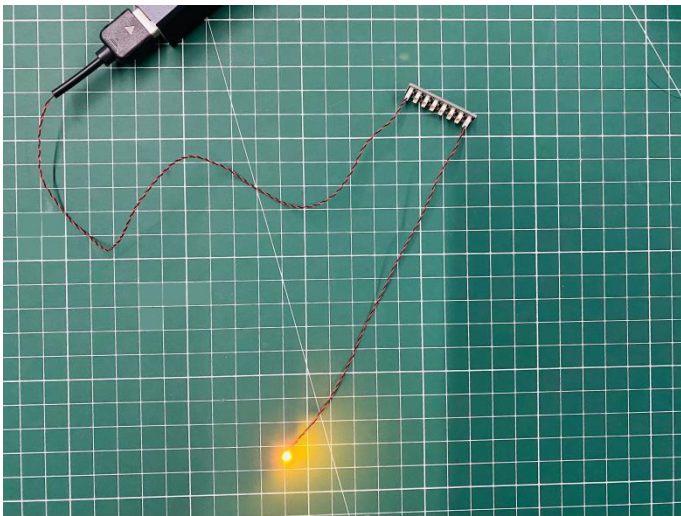
USB connectors to connect devices



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.

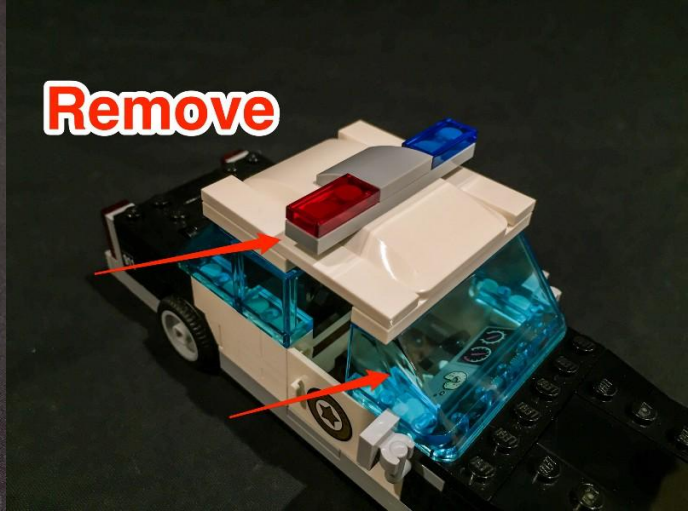
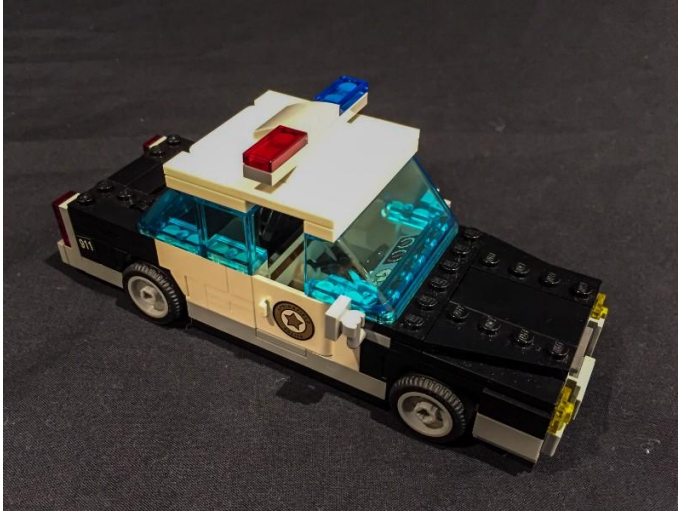


The components needs to be tested in this set is 3*Bit Lights-15CM-Warm White,7*LED Strip Lights-White,10*Bit Lights-30CM-Warm White,1*Flashing Bit Lights-30CM-Warm White,3*Flashing Bit Lights-30CM-Red,2*Flashing Bit Lights-15CM-Warm White.

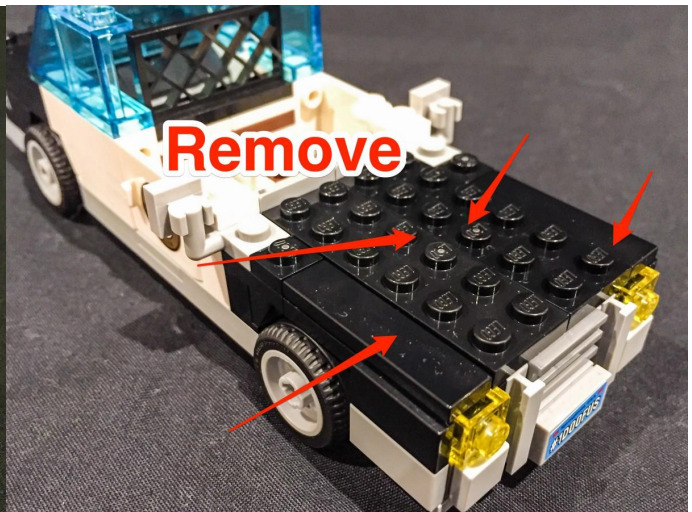
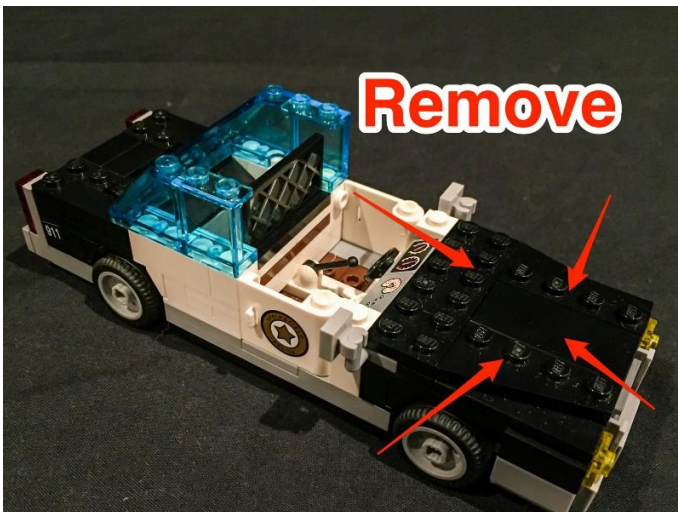
Please contact us immediately if any components don't work.

Section C: laying out components following the instruction.

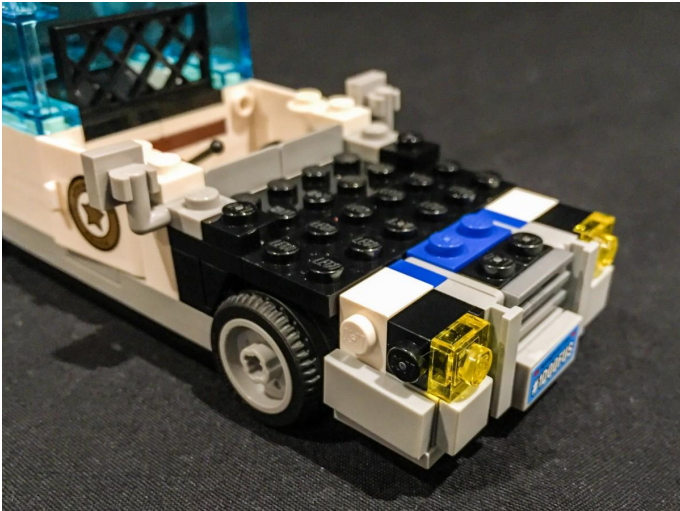
1. Start by removing the following pieces which make up the roof and windscreen, followed by the black plates and tiles from the front bonnet.



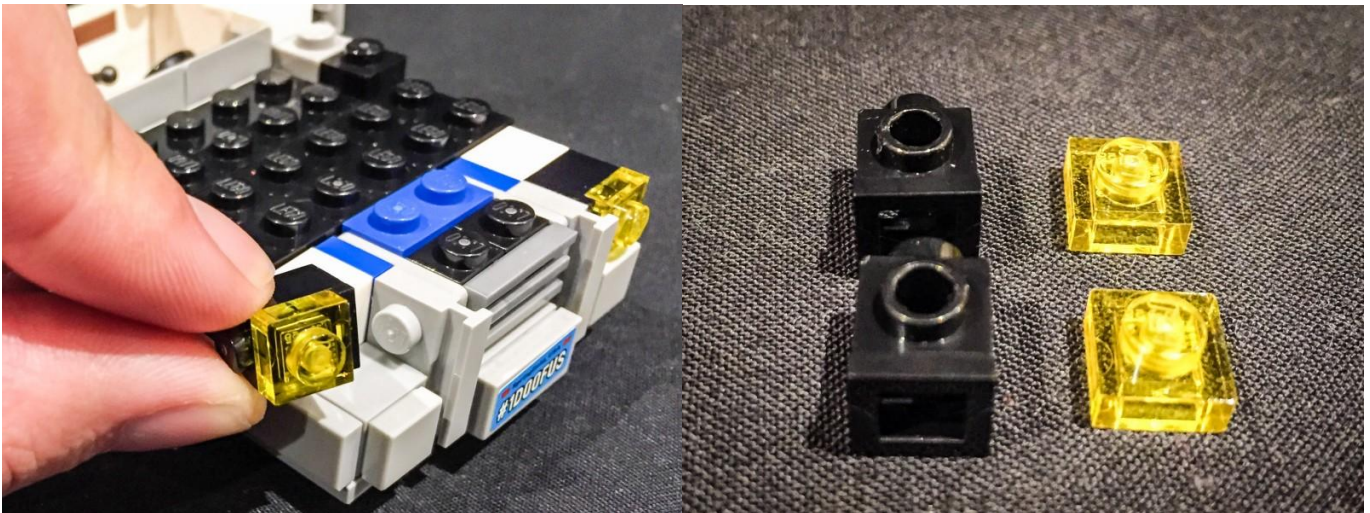
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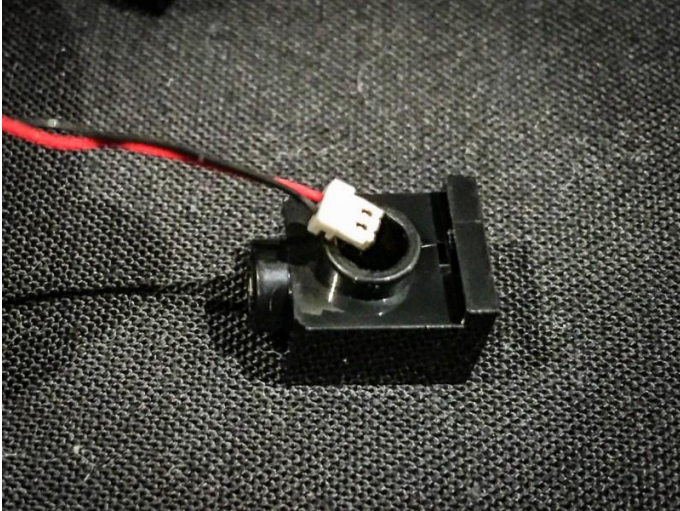
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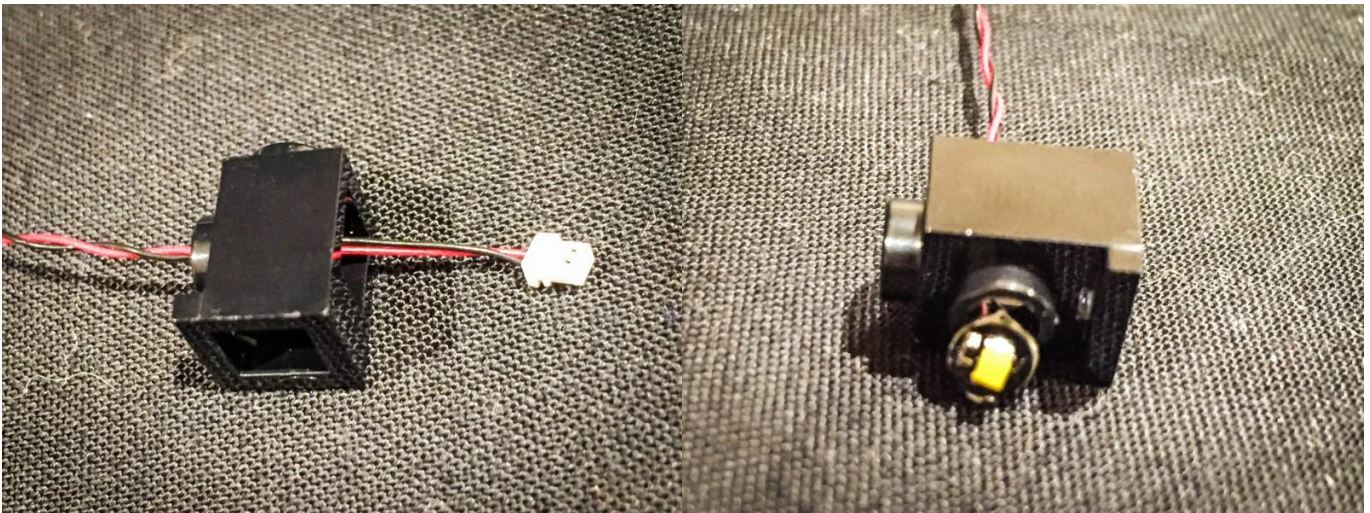
4. Disconnect from each side of the car, the black 1 x 1 brick with the transparent yellow plate attached. Remove the yellow plate from the black brick and take 1x White 15cm Dot Light and using the connector end of the cable of the LED, thread this through the hole of the front of the black brick.



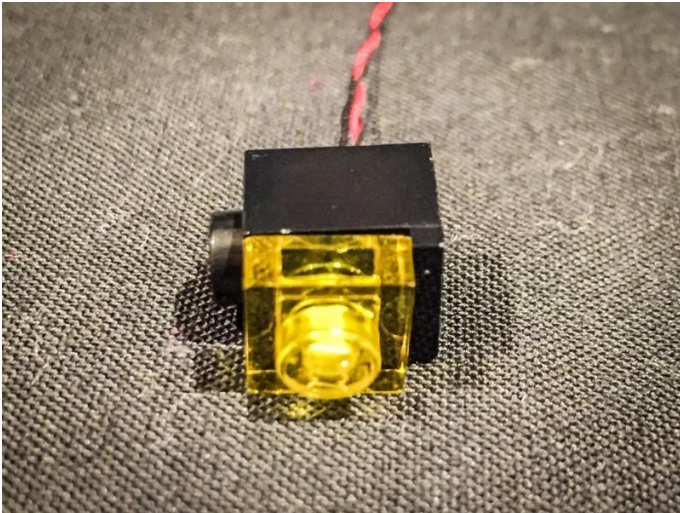
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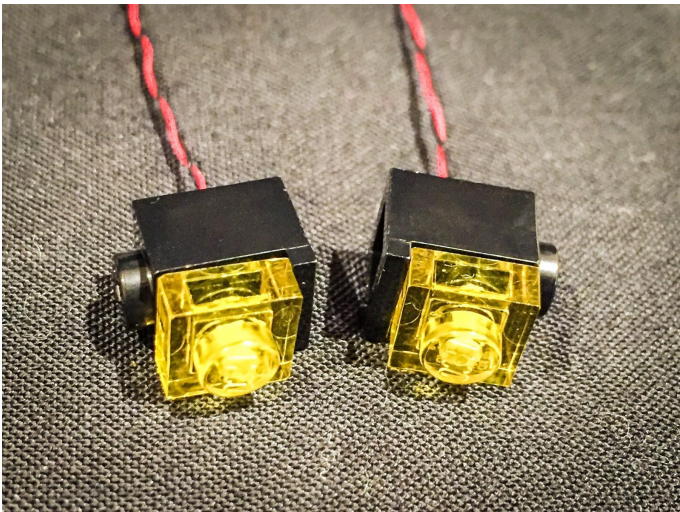
6. Pull the cable from the back of the black brick all the way until the LED component is flat up against the other side of the brick. Ensure that the LED component part is facing the correct way up, then secure this down by reconnecting the transparent yellow plate over the top.



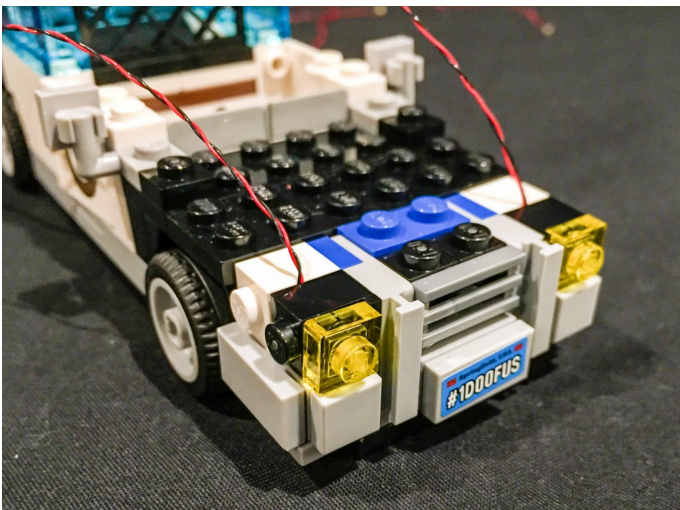
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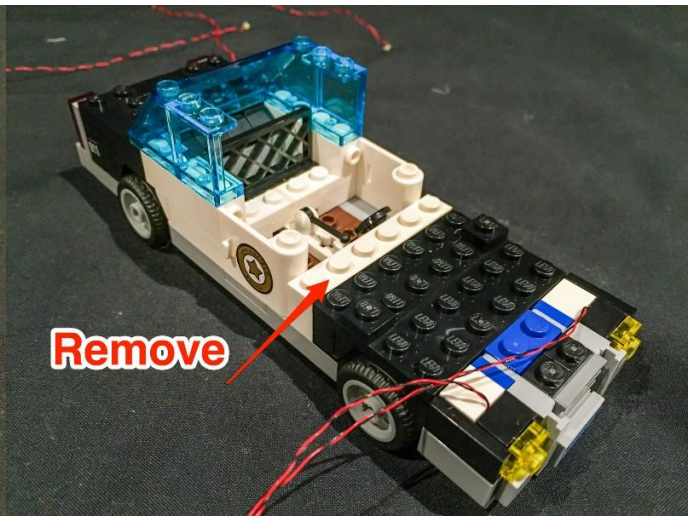
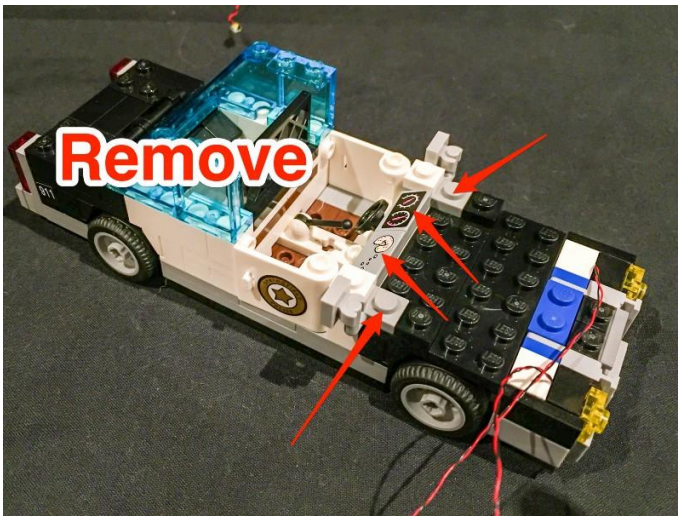
8.Repeat this step for the other head light of the car using another White 15cm Dot Light.



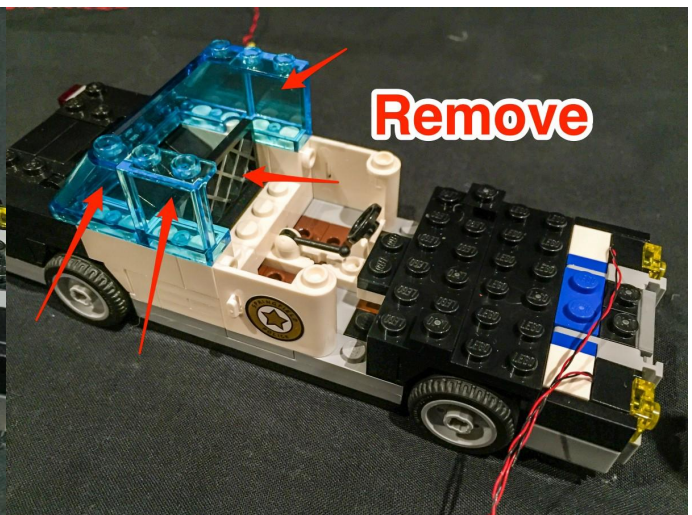
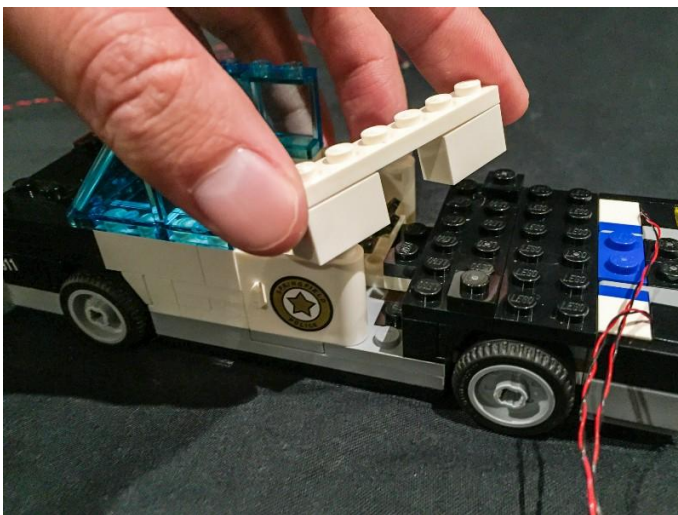
9.Reconnect the 2 head lights back to the front of the car ensuring the cables for the lights are facing up.



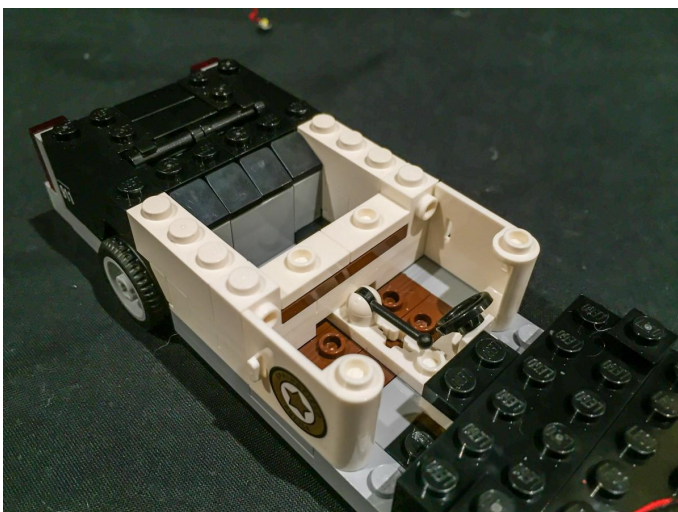
10. Next step is to remove the following pieces from the car so that we can lay the cables from the headlights underneath and all the way to the back.



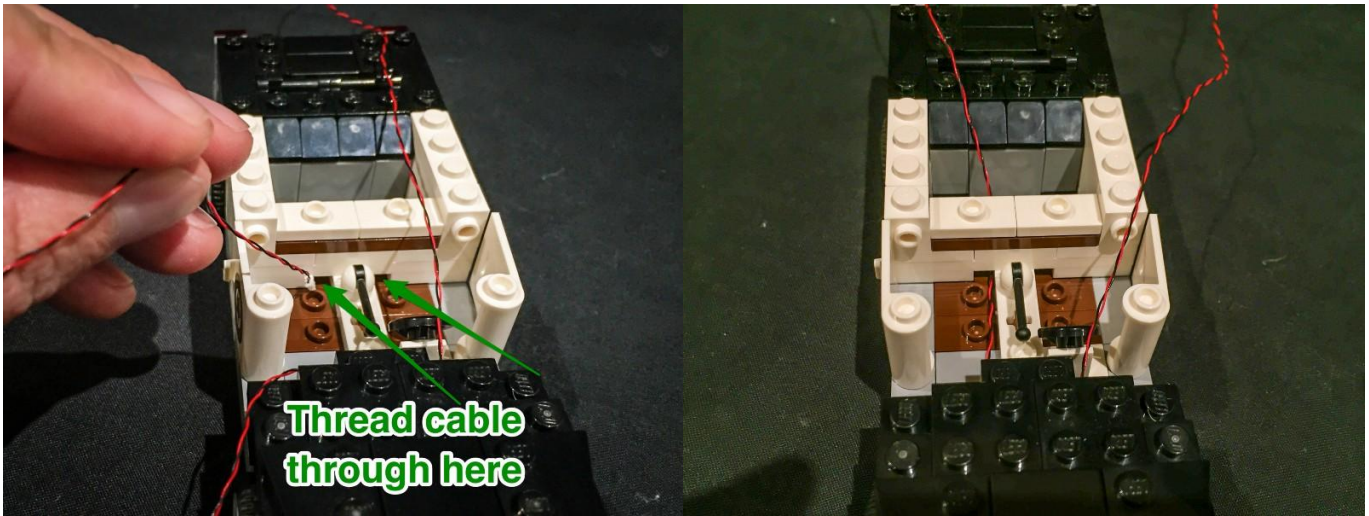
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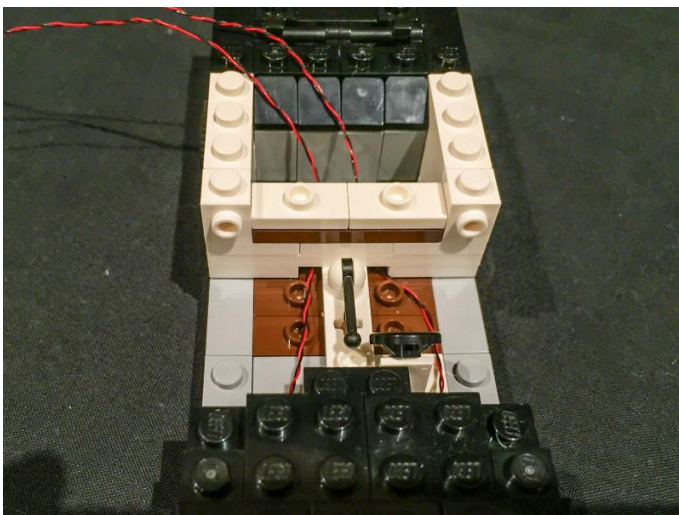
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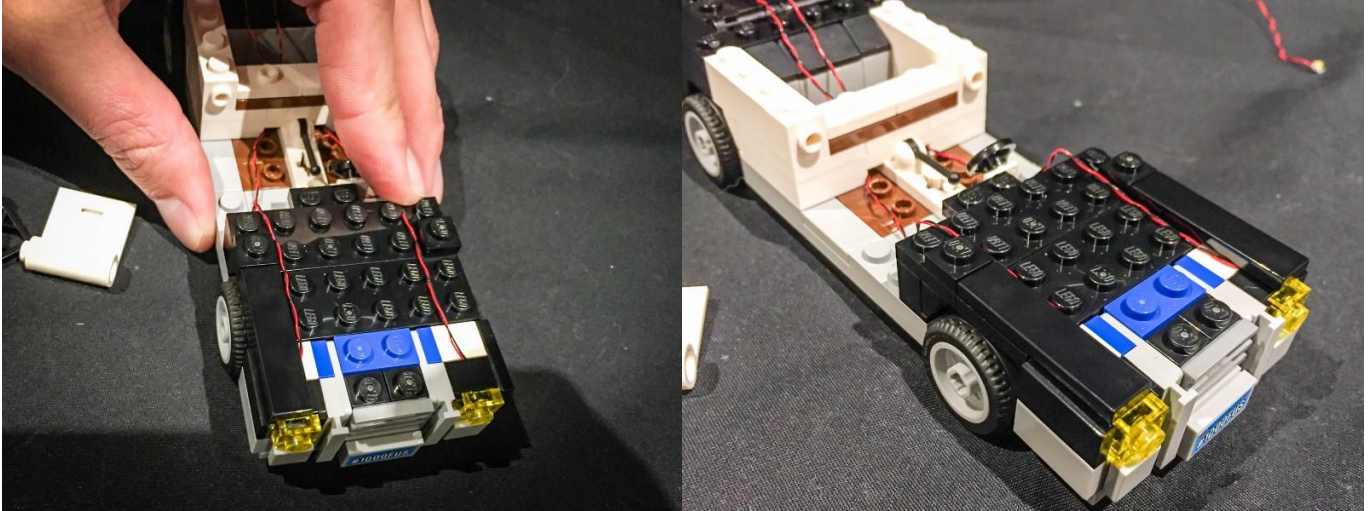
13. Thread the 2 cables through the small holes behind the front seats, 1 cable through each hole.



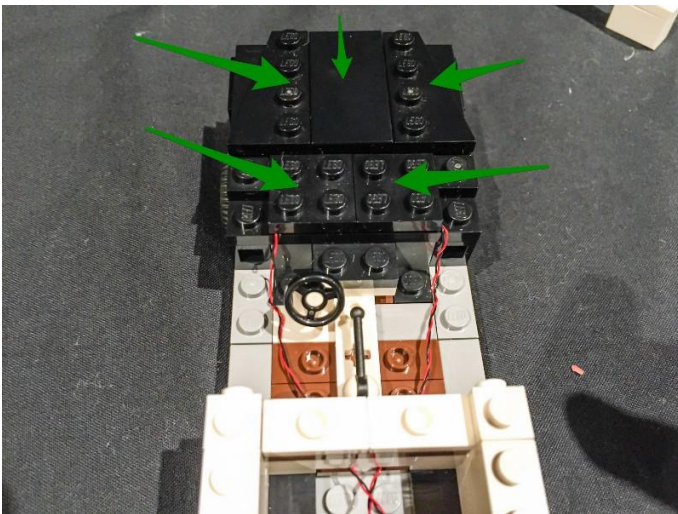
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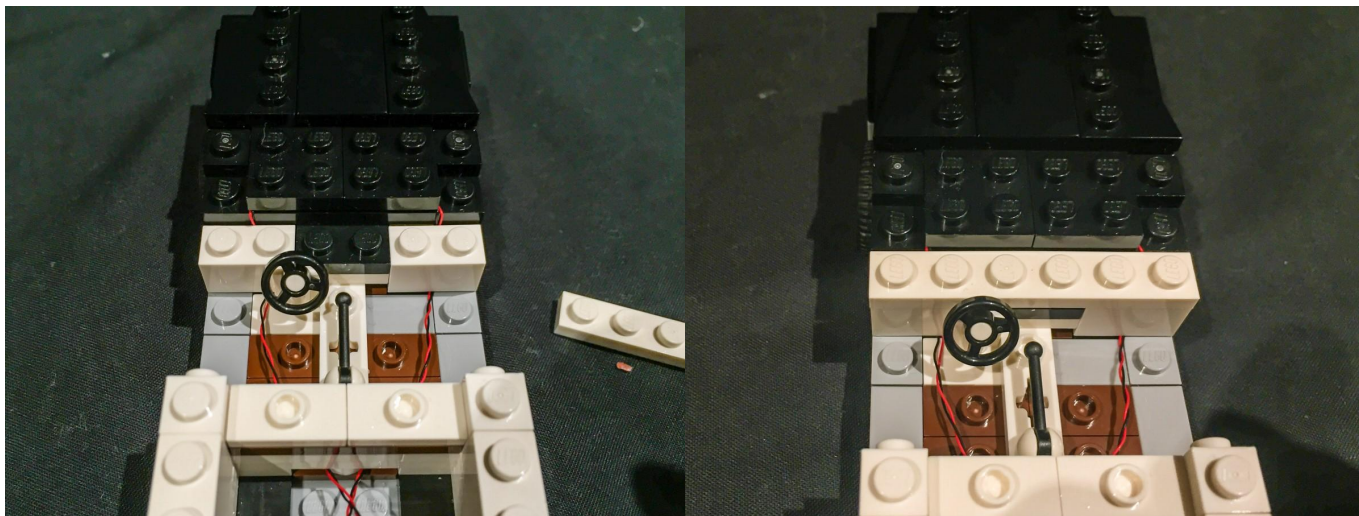
**15.Ensure the cables are laid on the side of each of the brown studs
Start securing the cables down by reconnecting back plates and
tiles over the top. Before doing so, ensure that the cables are laid in
between studs exactly the same way as the below images.**



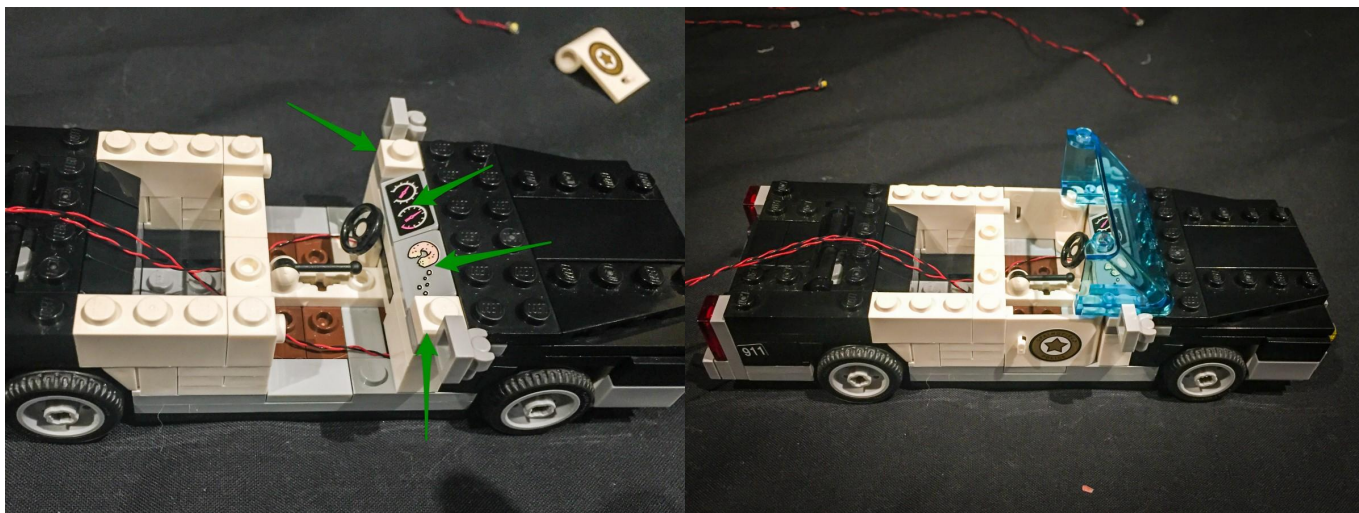
16



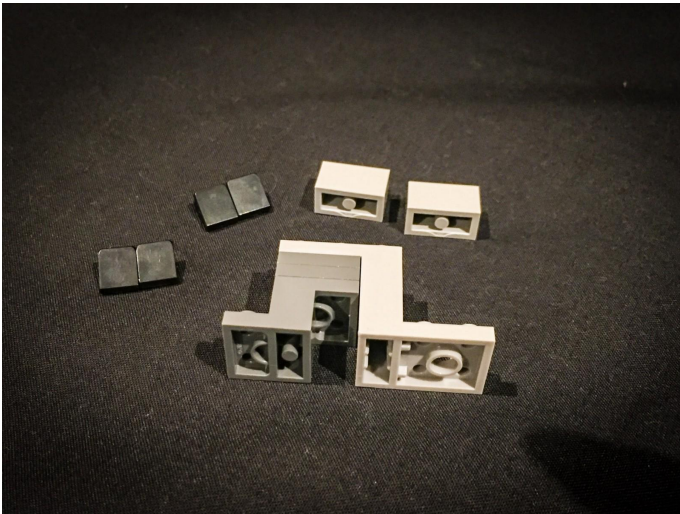
17.Reconnect the white bricks as per below ensuring that the cables are laid in between the black and white studs underneath.



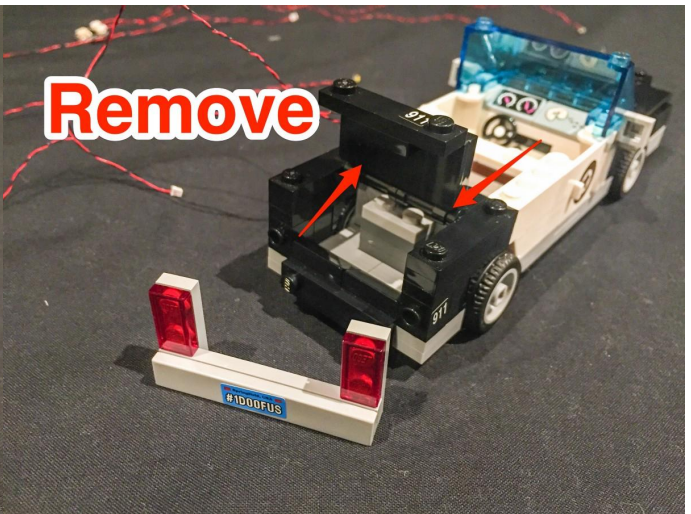
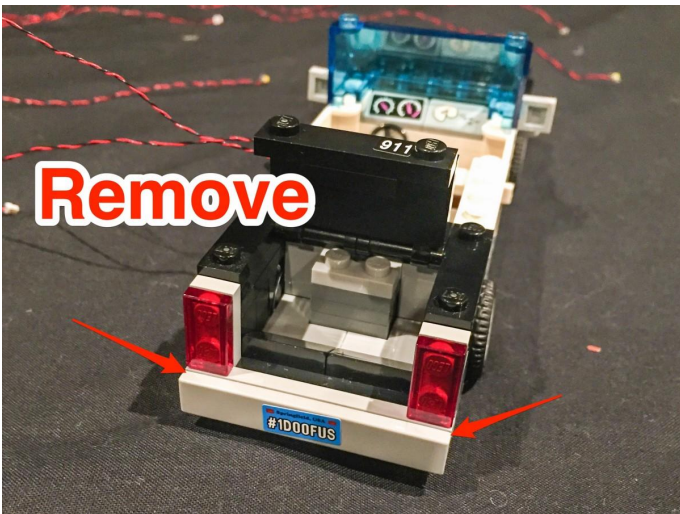
18.We can now also reconnect the pieces which make up the front of the dash board, side mirrors, and front windscreen.



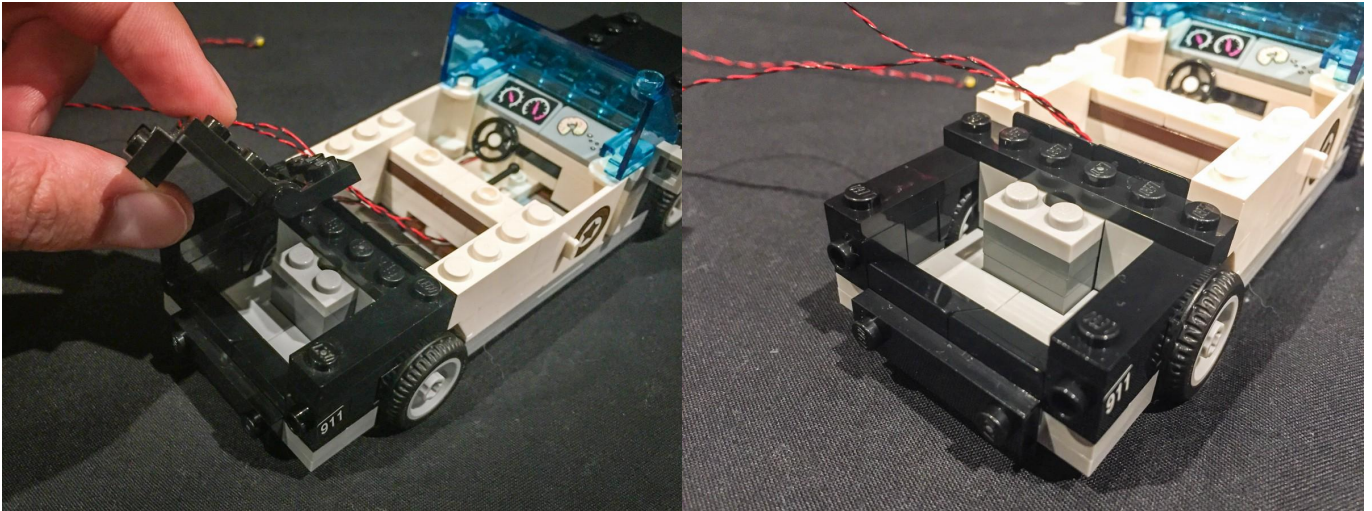
19. In order to hide the rest of the contents from this lighting kit in the back section of the car, we will be removing and discarding the following pieces.



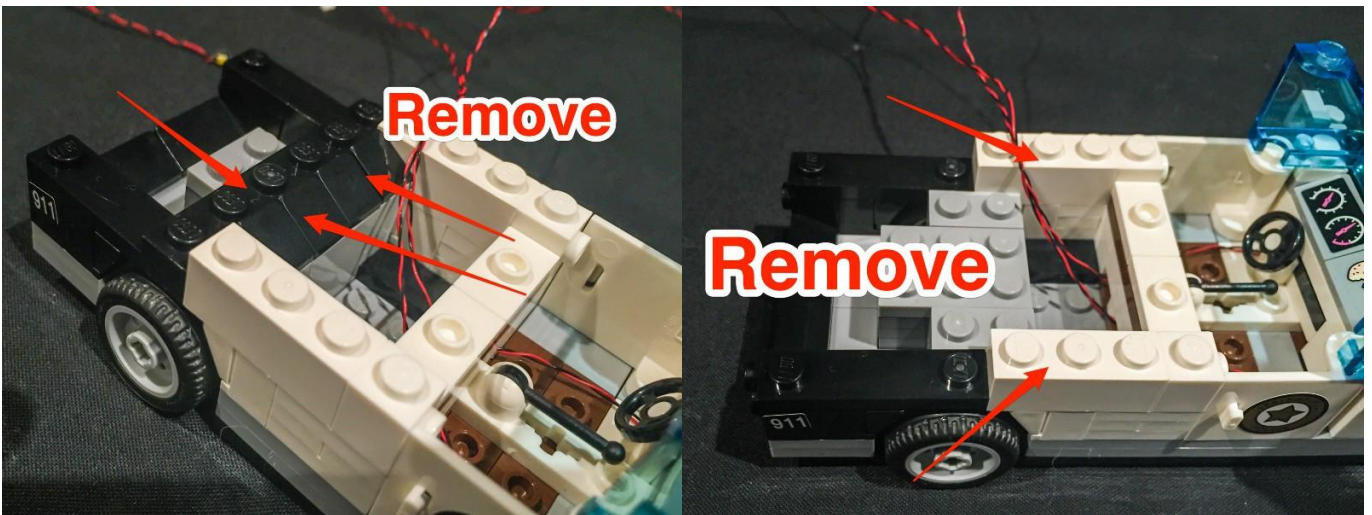
20. First, turn the car around to the back and remove the back bumper with tail lights attached, followed by the boot cover.



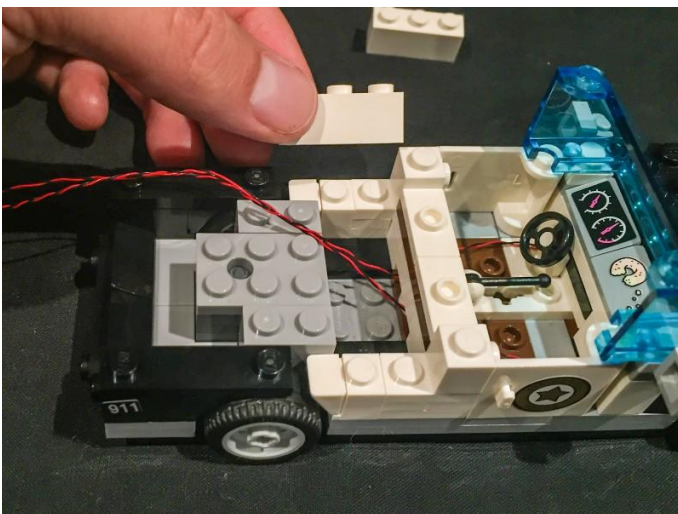
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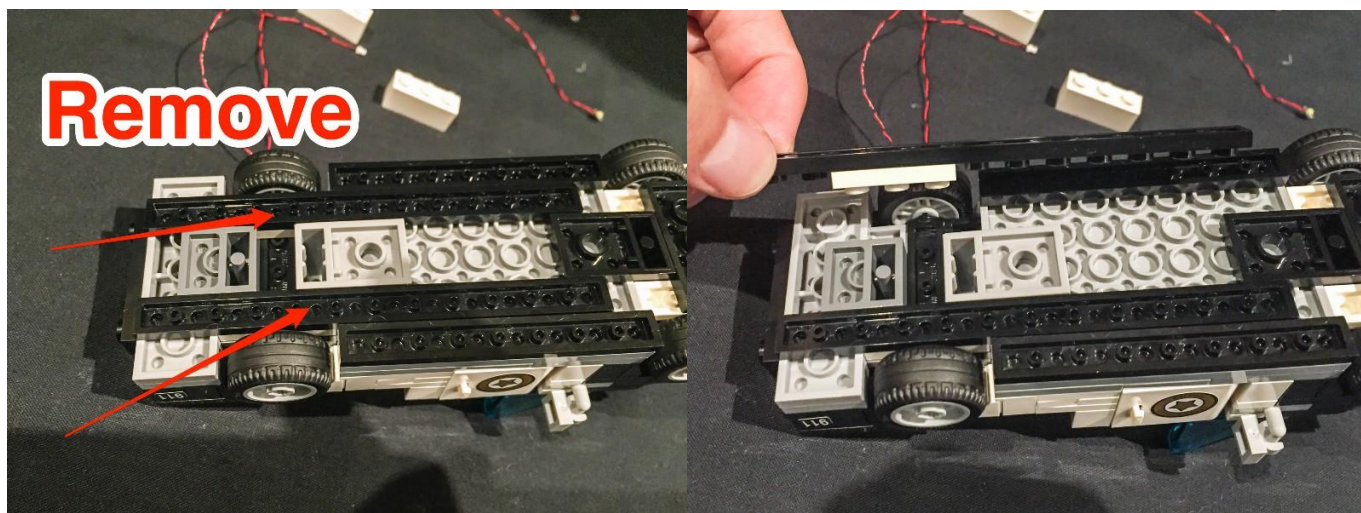
22. Continue to remove the following pieces from the back of the car.



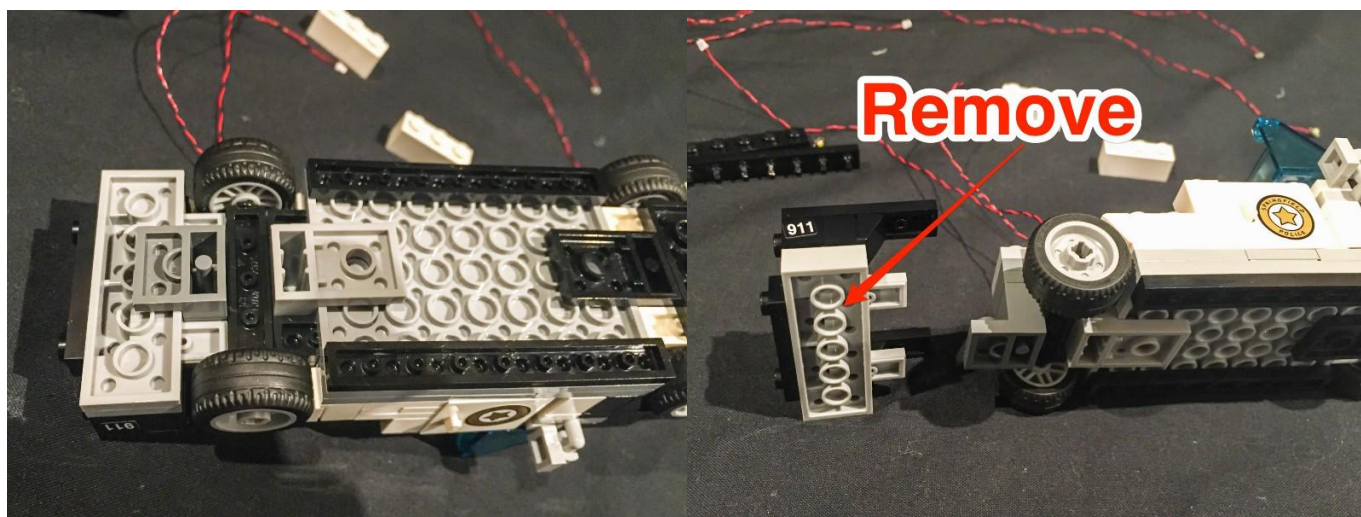
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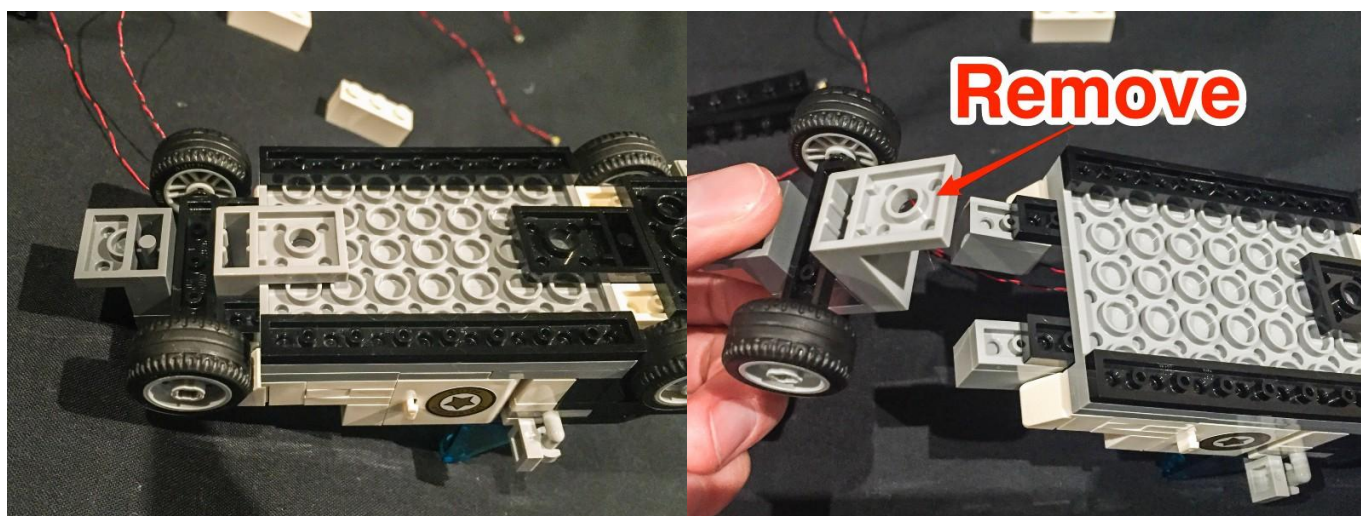
24. Turn the car over and remove the following pieces.



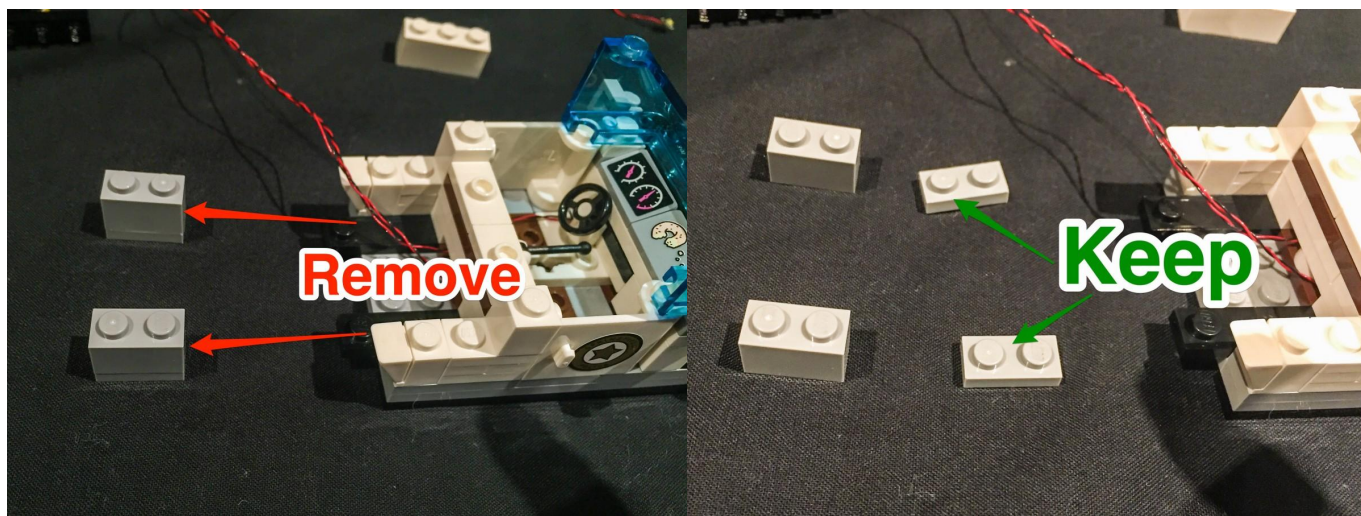
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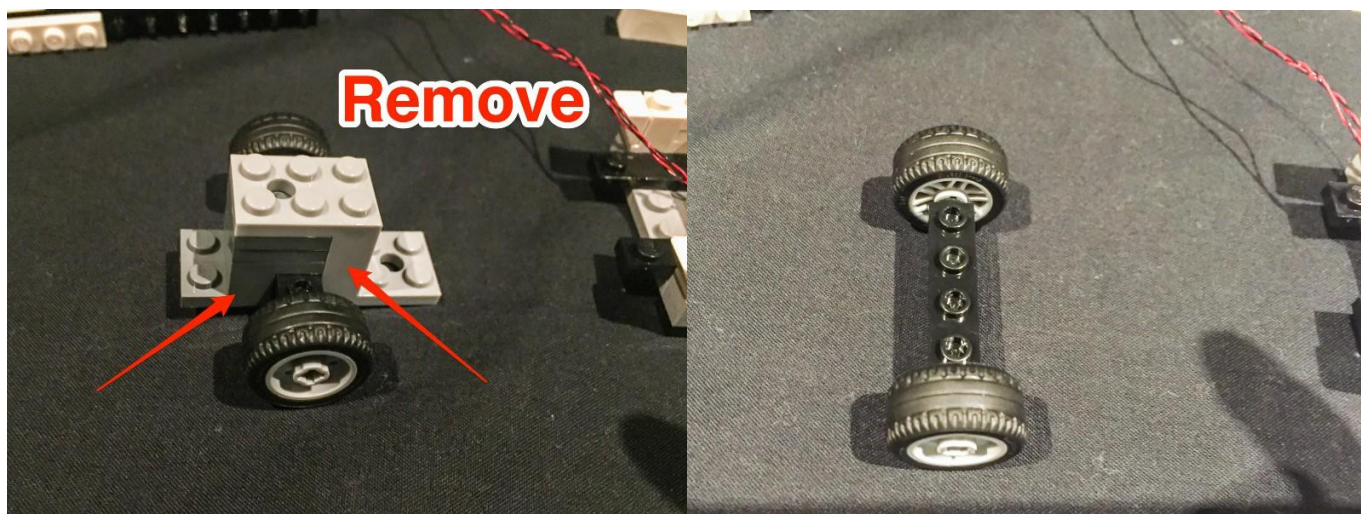
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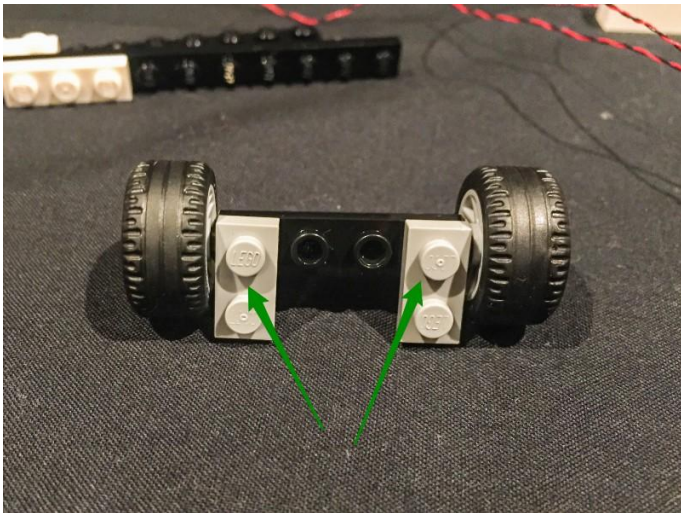
27. Remove the 2 grey bricks with plates attached below, then separate these pieces and hang on to the 2 grey plates.



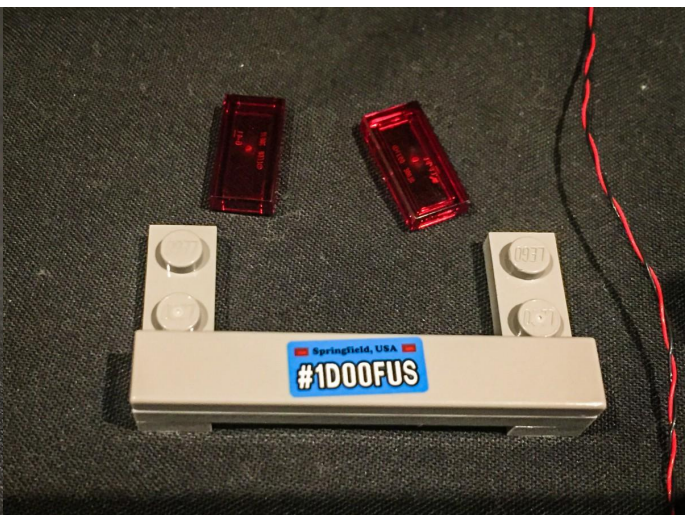
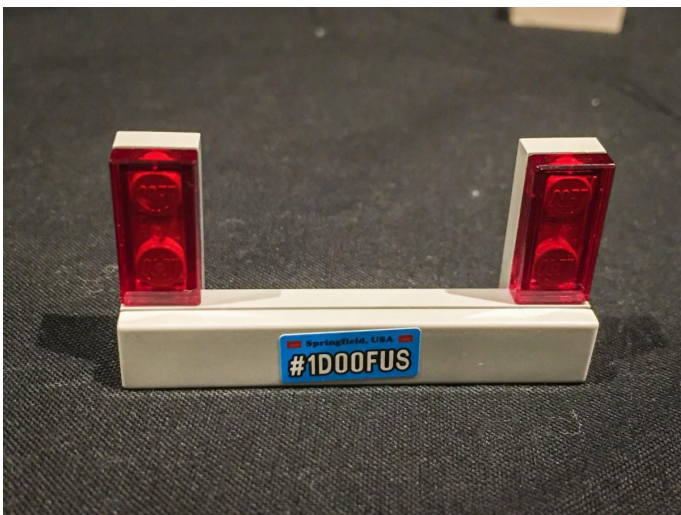
28. Remove the following pieces from the rear wheels and then connect to the axle, the 2 grey pieces we kept in the previous step in the following position.



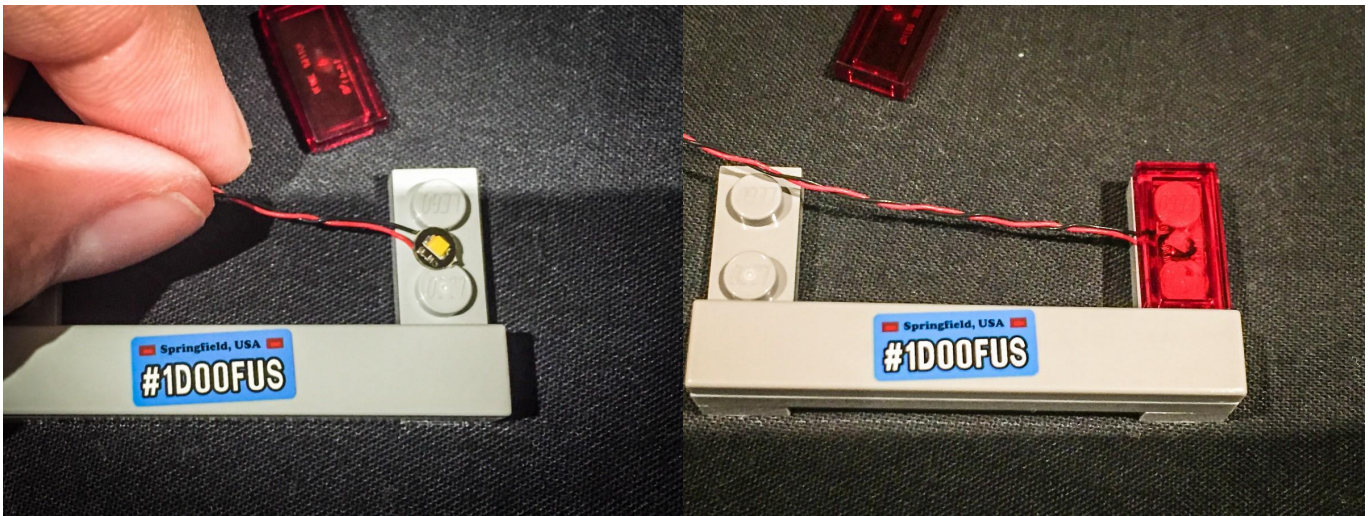
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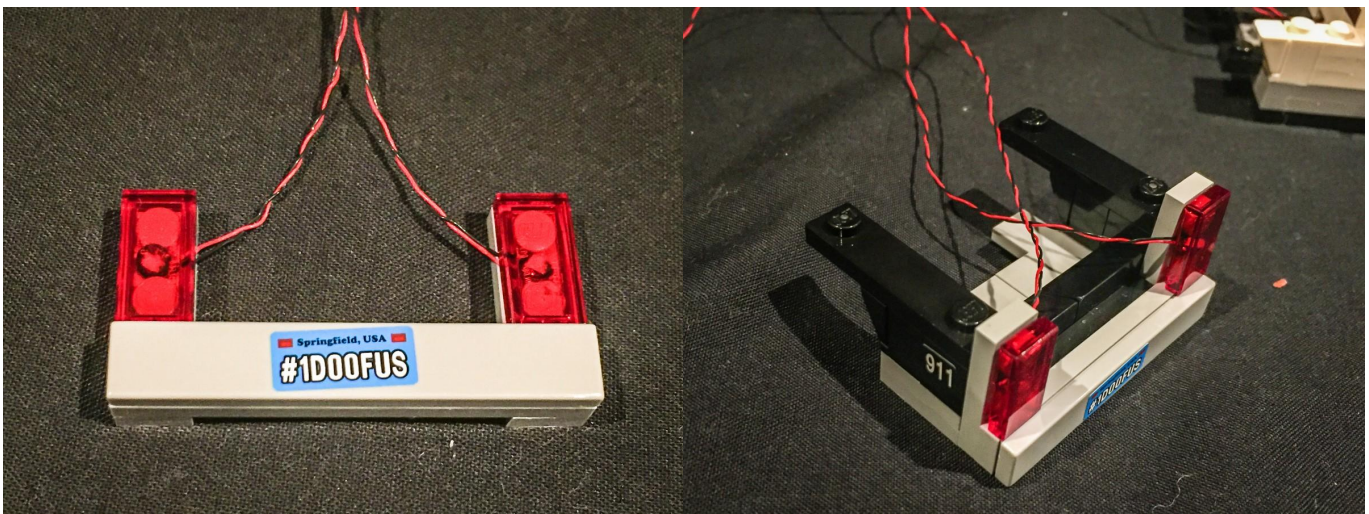
30. We are now ready to install the 2 tail lights. Take the bumper with lights attached and remove the 2 transparent red plates.



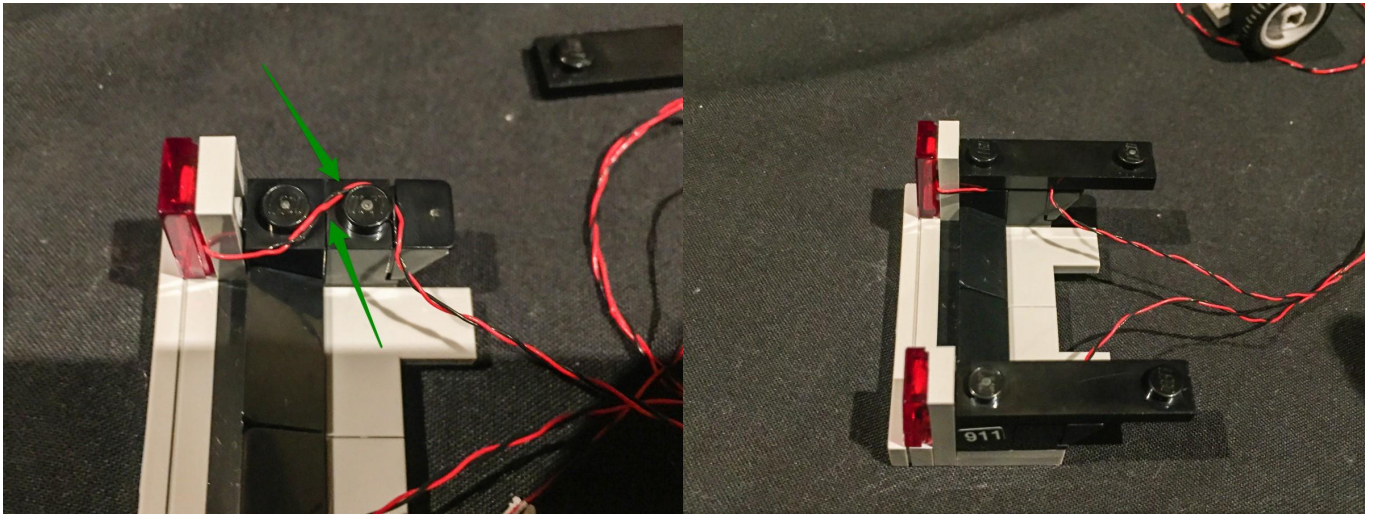
31. Take another White 15cm Dot Light and place it in between the 2 grey studs. Secure this LED in place by reconnecting a transparent red plate over the top.



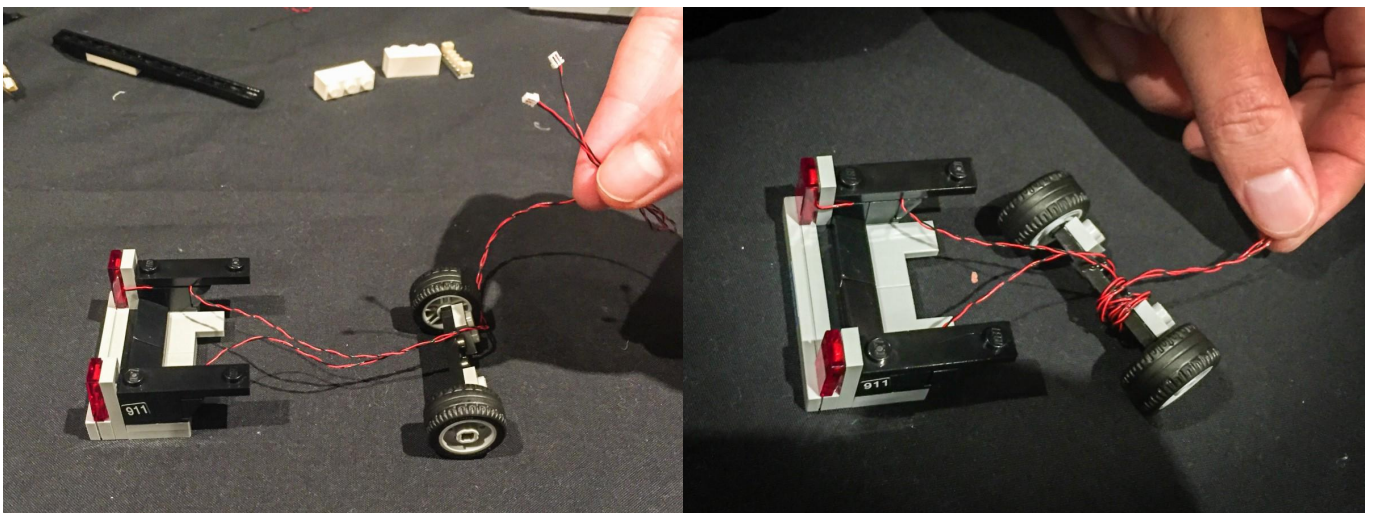
32. Repeat this step for the 2nd tail light using another White 15cm Dot Light then reconnect the bumper to the back section of the car.



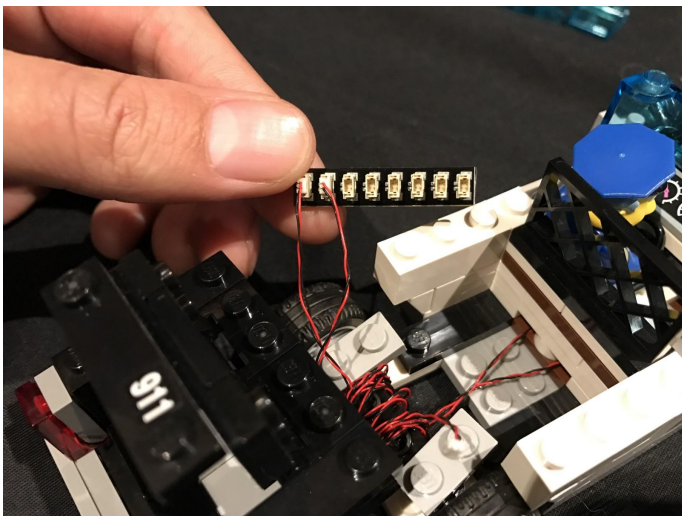
33. Secure the 2 cables from the tail lights to the inside of the boot by laying them in between studs underneath the black plate on each side.



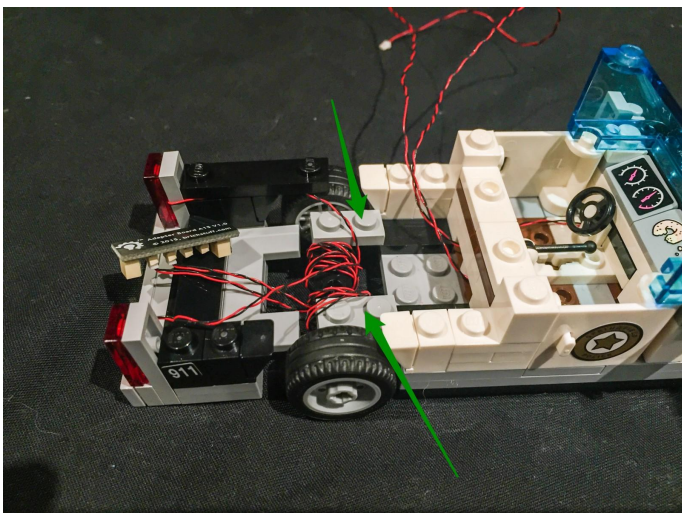
34. Take the 2 cables and then pull them together and twist them around so they both come together. Wind the cables around the axle of the rear wheels a few times until you have about 2–3 cm of excess cable left on each side.



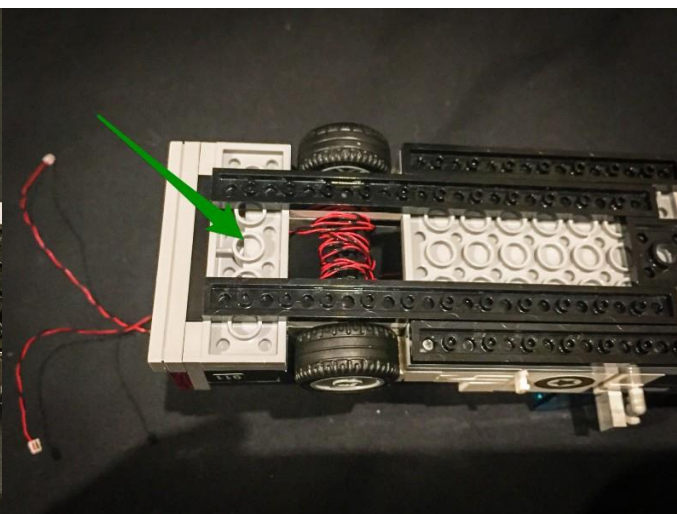
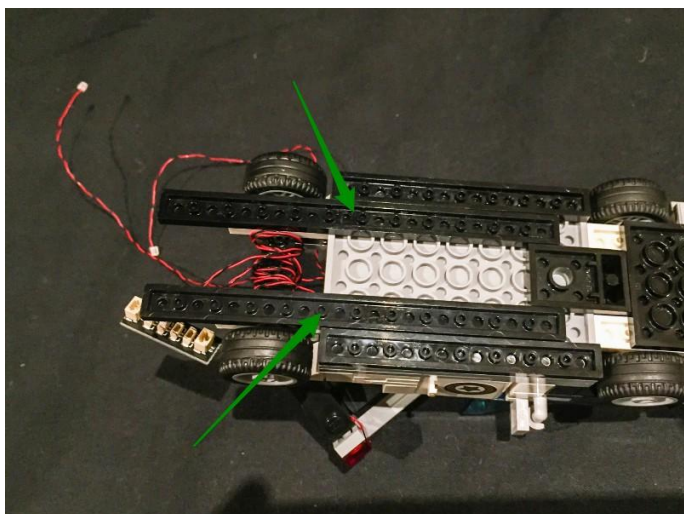
35. Connect these 2 lights to first available ports on the 8-port expansion board.



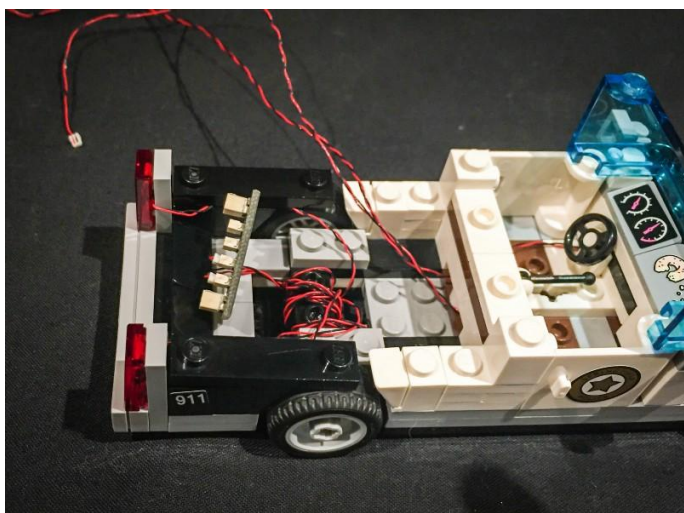
36. Reconnect the rear wheels along with the back section of the car to the rest of the car using the 2 grey pieces.



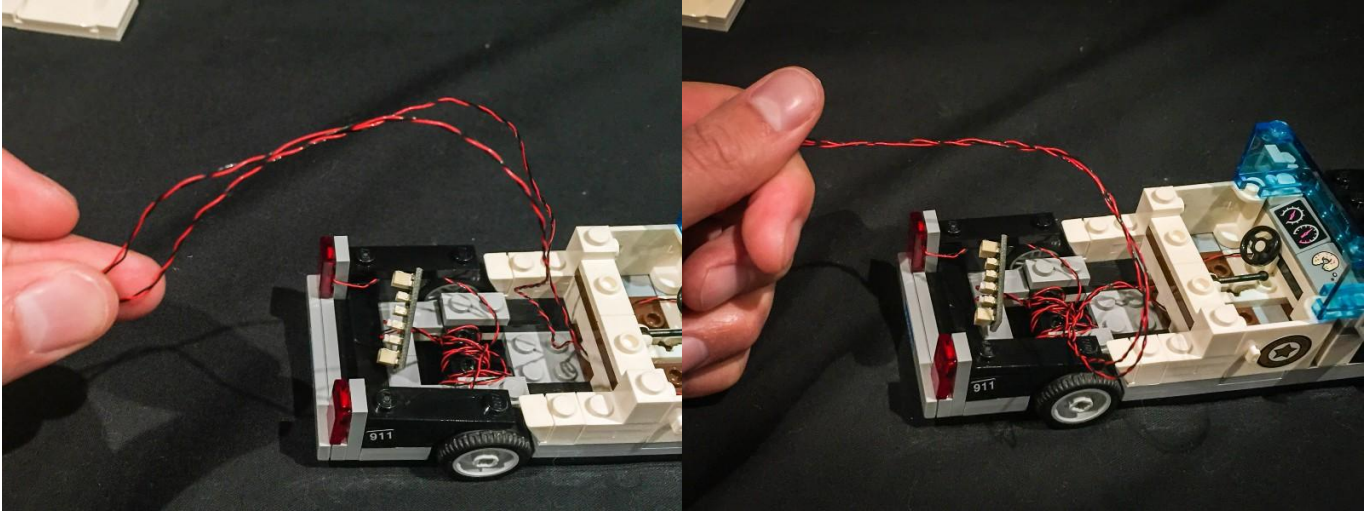
37. Flip the car over and then reconnect the 2 long black plates (which we removed earlier). This will then allow the back section of the car to be secured to the car.



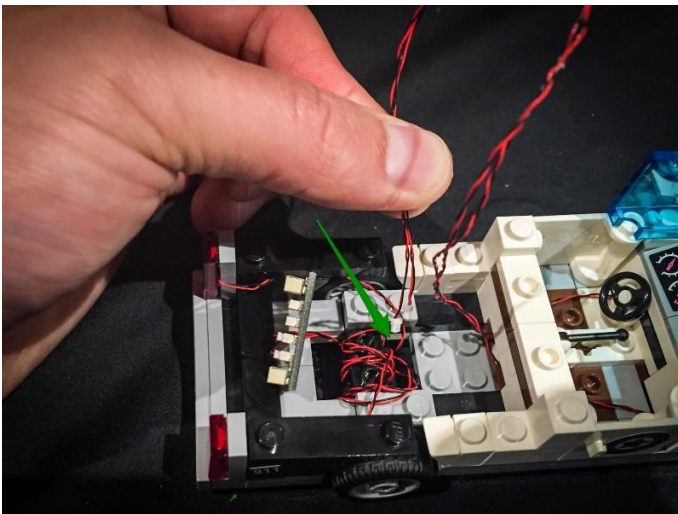
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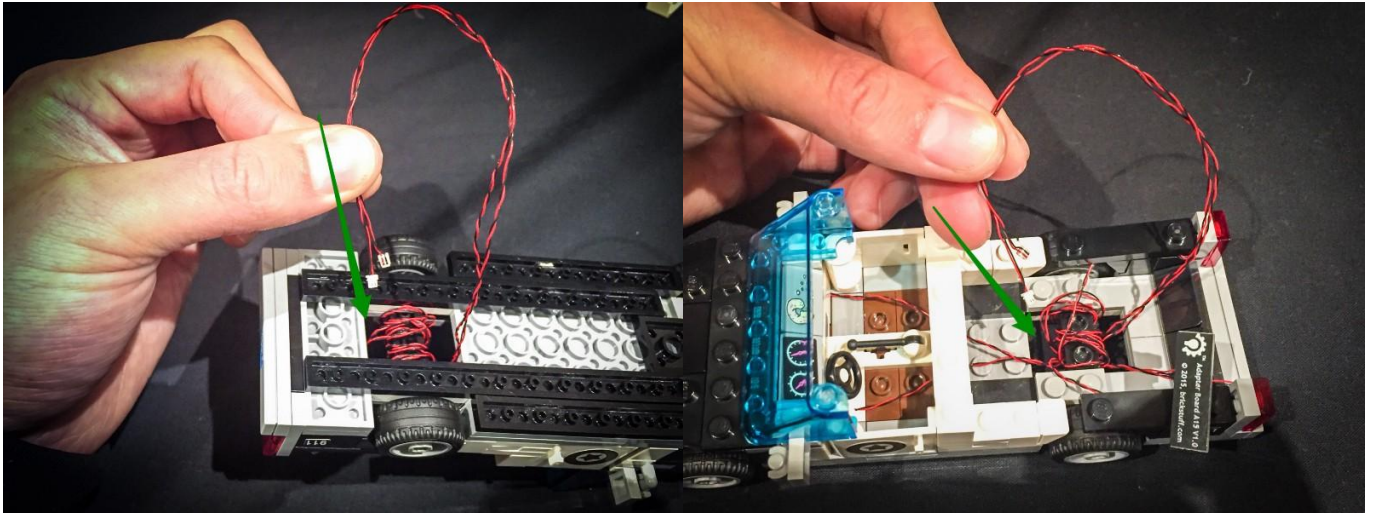
39. Take the 2 cables from the front lights and twist them around so they come together. Thread them down the space in between the axle and the grey piece (4 grey studs).



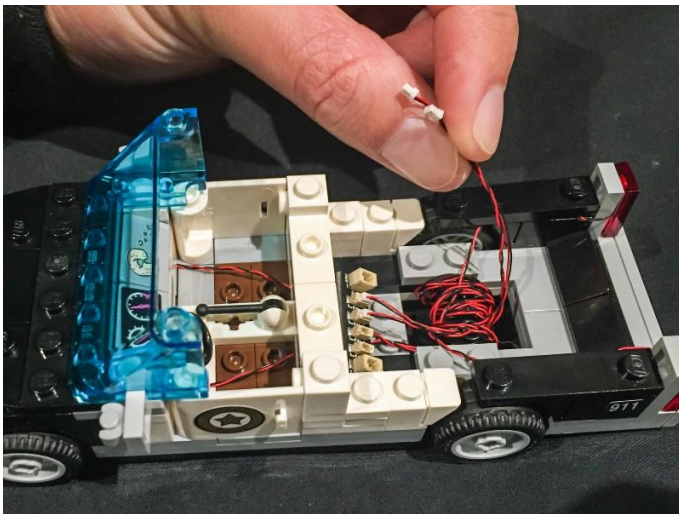
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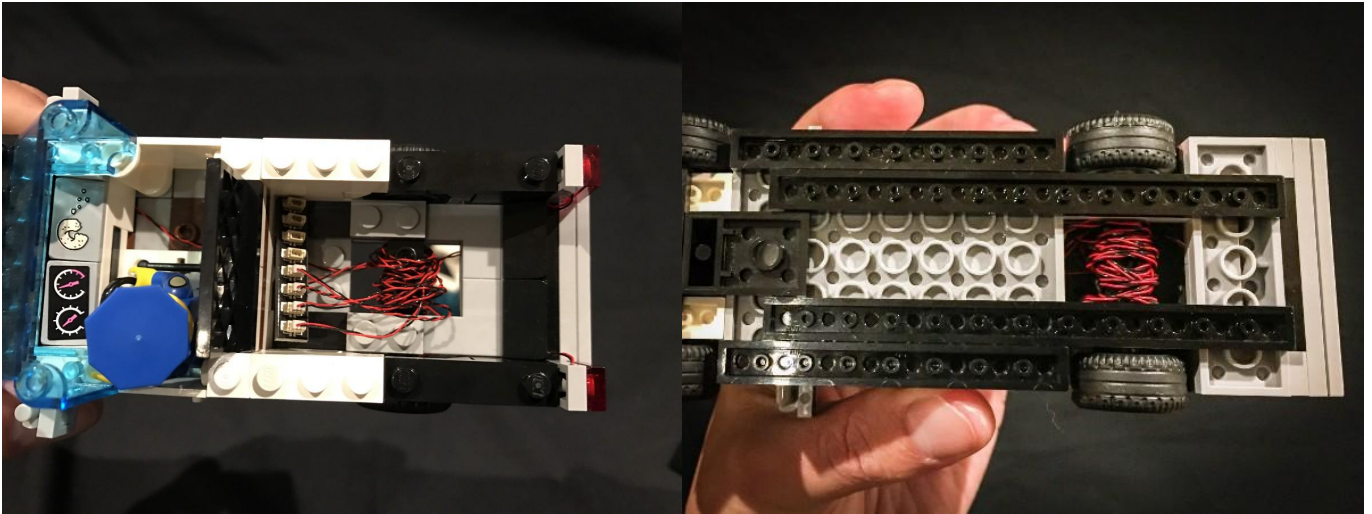
41. Turn the car over and then pull the 2 cables up from underneath all the way and then then thread them down again over the axle. Repeat this process a few times (threading the cable around the axle) until there is only approx 3 cm left of the cable.



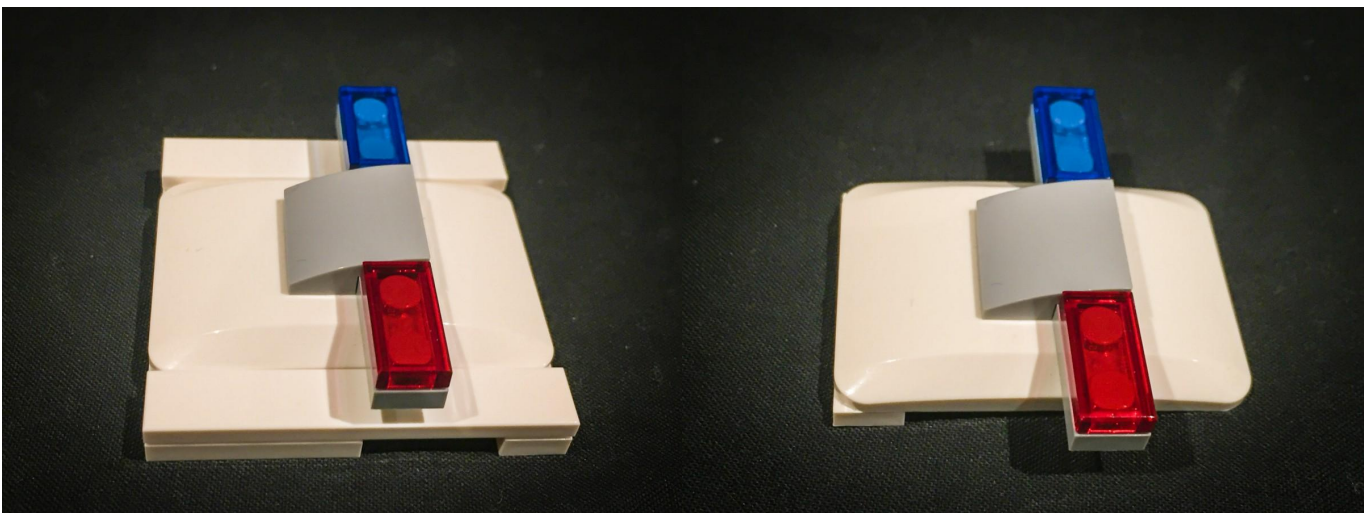
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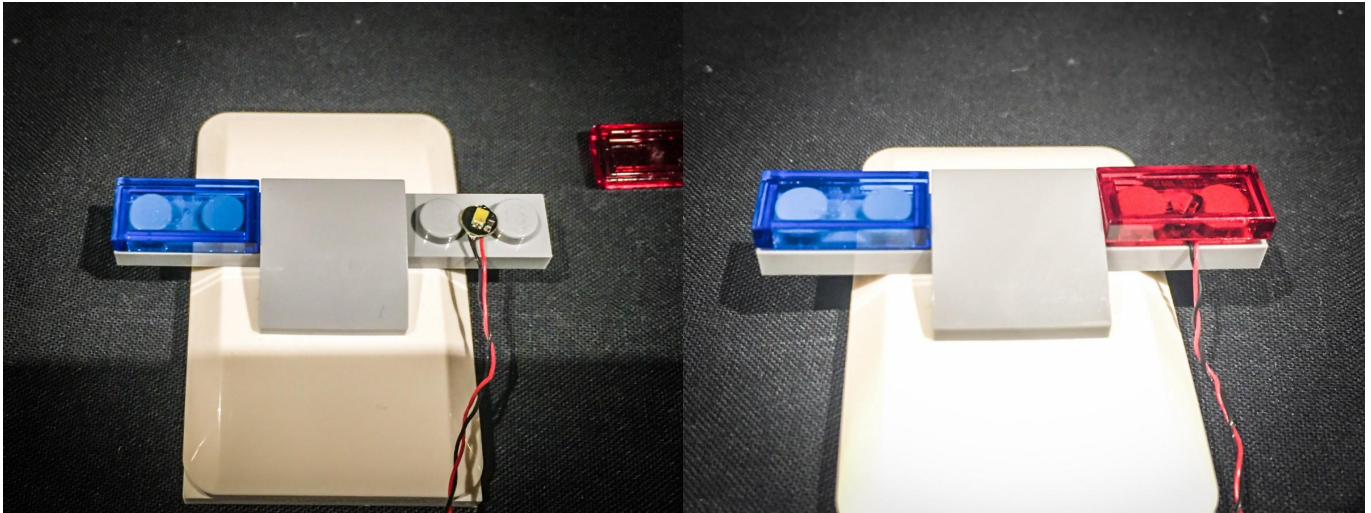
43. Plug the 2 cables into the next available ports on the expansion board.



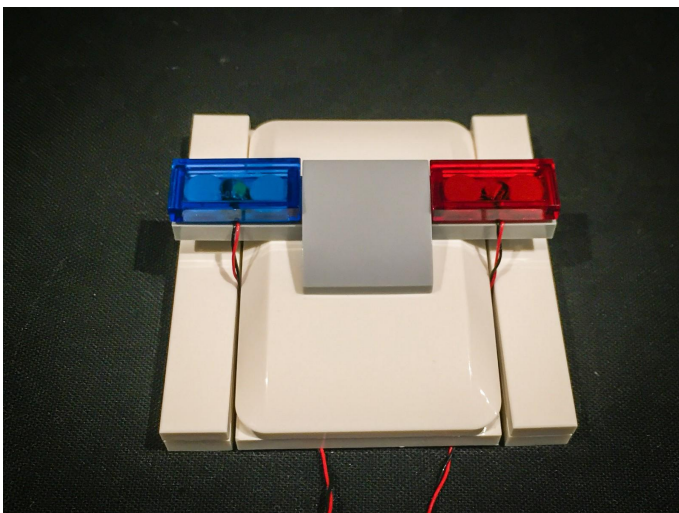
44. We will now install flashing lights to the siren lights on the roof of the car. Take the roof and remove the long white plates on each side.



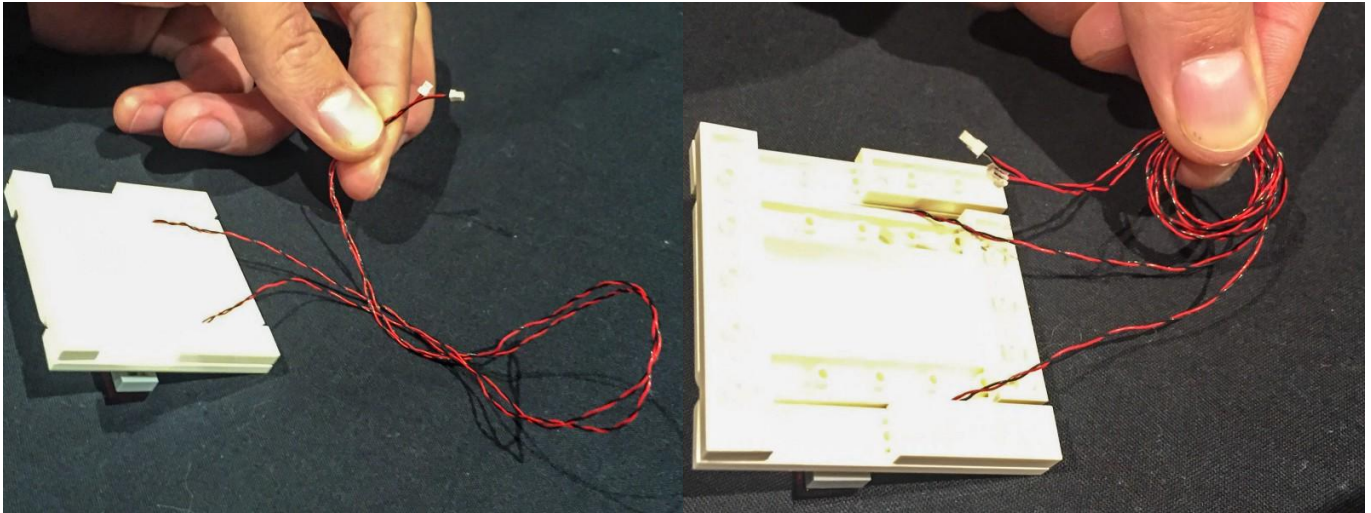
45. Remove the transparent red tile and then take one of the Flashing White 15cm Dot Lights and place it in between the 2 grey studs, then secure the LED in place by reconnecting the transparent red tile over the top.



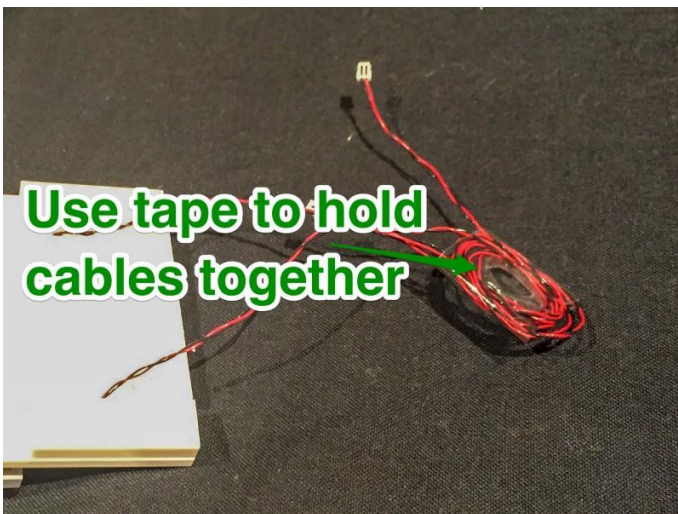
46. Repeat this process using another Flashing White 15cm Dot Light for the blue light. Then reconnect the long white tiles on each side ensuring the cables are pulled down in between.



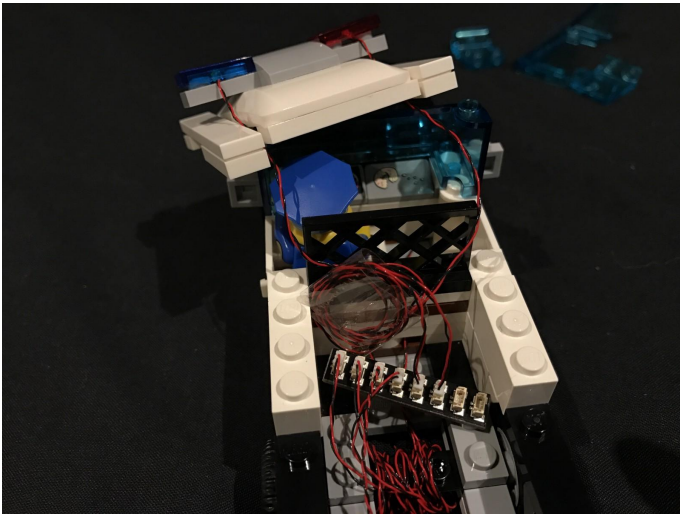
47. Take the 2 cables from underneath the roof and twist them so that they come together. Wind them around so they form a neat loop of cables with a diameter of around 1.5cm. Use a bit of tape to hold them together, preventing them from untangling.



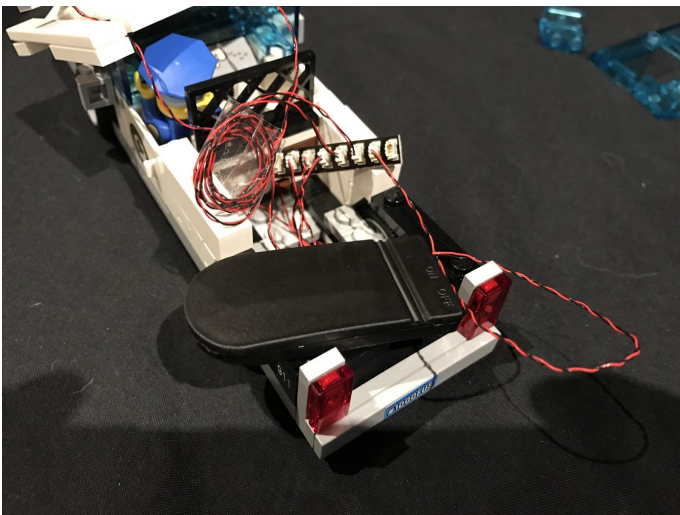
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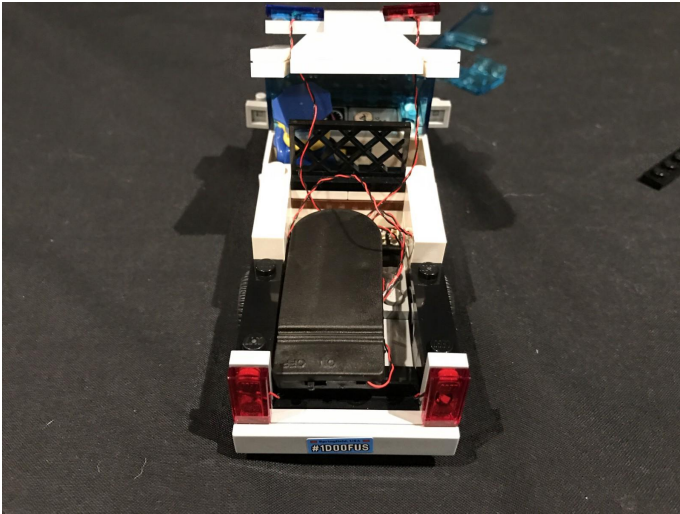
49. Place the roof with lights installed on top of the car and then connect the 2 flashing Dot Light cables into the next available ports on the expansion board.



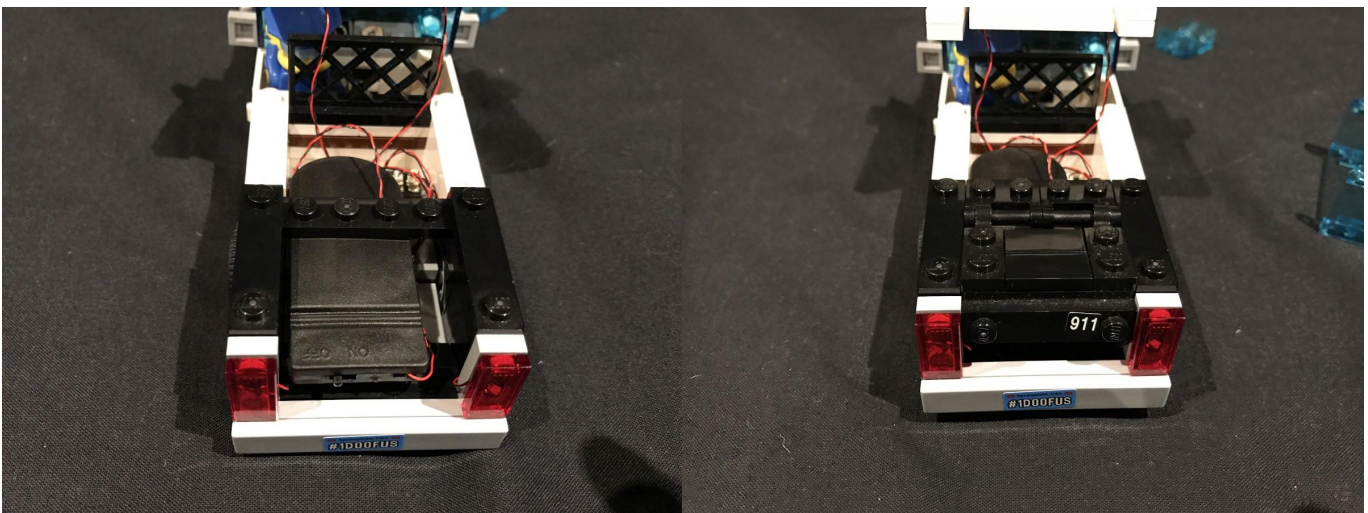
50. Take the flat battery pack and insert 2x CR2032 batteries, then connect the battery pack cable to the spare port on the expansion board.



51. Place the battery pack in the following position ensuring that the on/off switch is facing the outside.



52. Reconnect the pieces that surround the boot of the car to secure the battery pack.



53.Reconnect the the side windows and back windscreen before reconnecting back the roof of the car. While doing so, ensure that the cables from the flashing lights are neatly kept in the back section underneath.



54.Installation of this Police Car lighting kit is now complete.



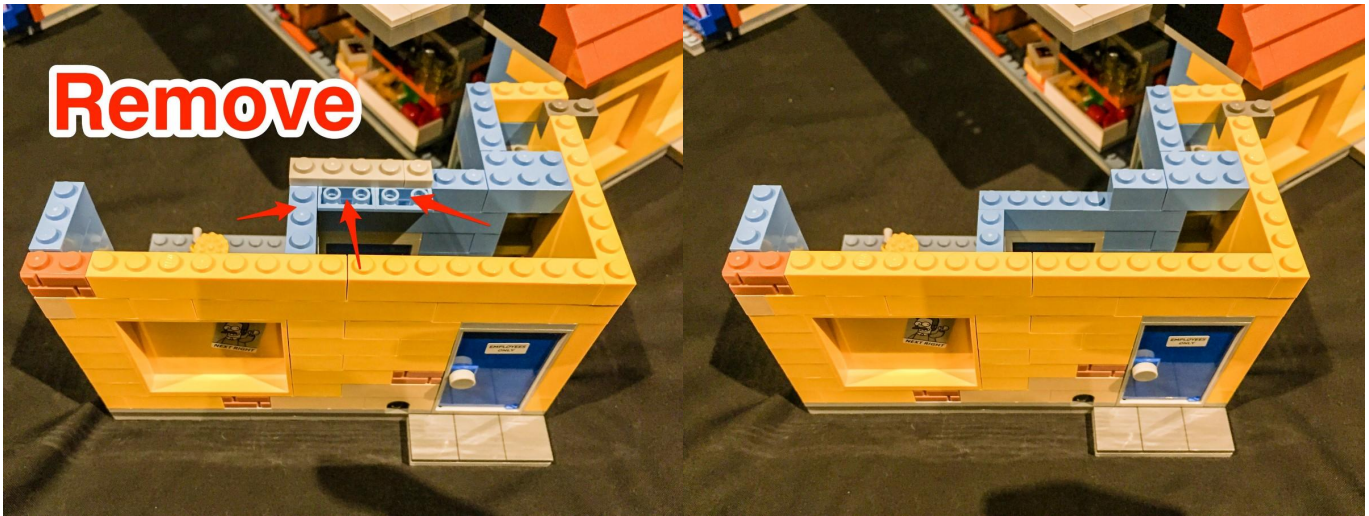
55. We will install lights starting from the right sections (store room) of the Kwik-E-Mart. We will need to first remove the roof of the right section by using the tool to remove the roof at the following sections.



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57. We will be installing the battery pack to the “store room”. Remove the following bricks to allow enough space for the battery pack to go.



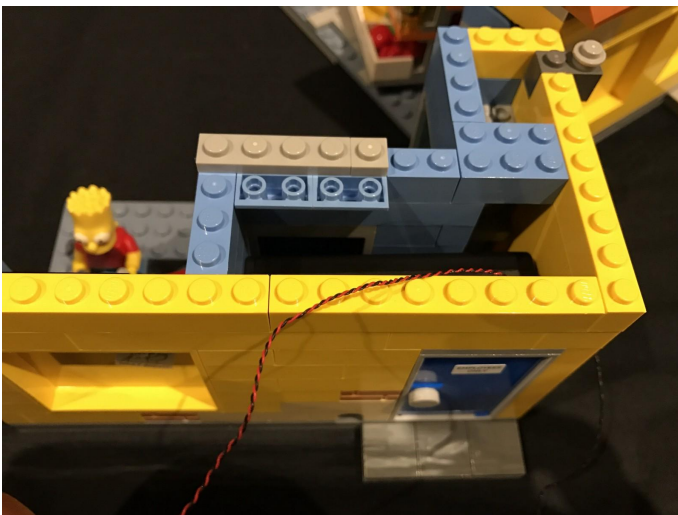
58. Take the battery pack and insert 3x AA batteries, then place it down the spacing in between the walls. Ensure the battery pack is inserted in the exact position per below, as the “on-off” switch will need to be accessible by opening the back door.



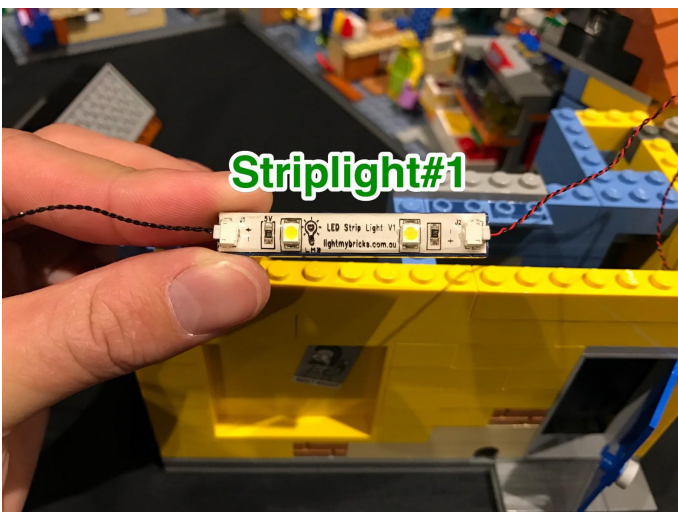
59



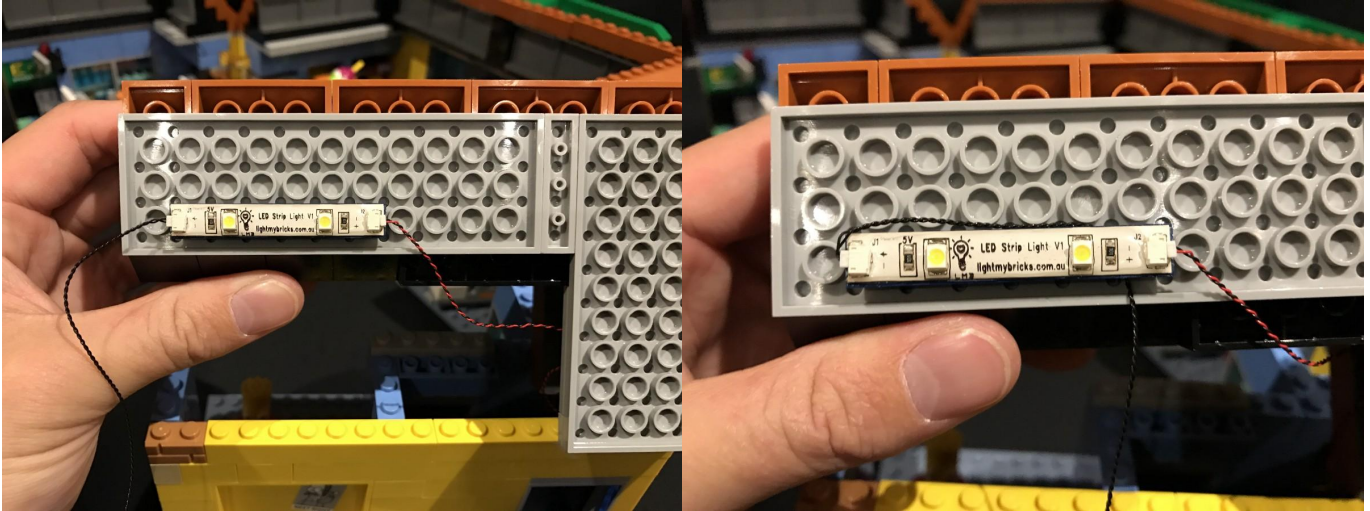
60.Reconnect the pieces we removed earlier.



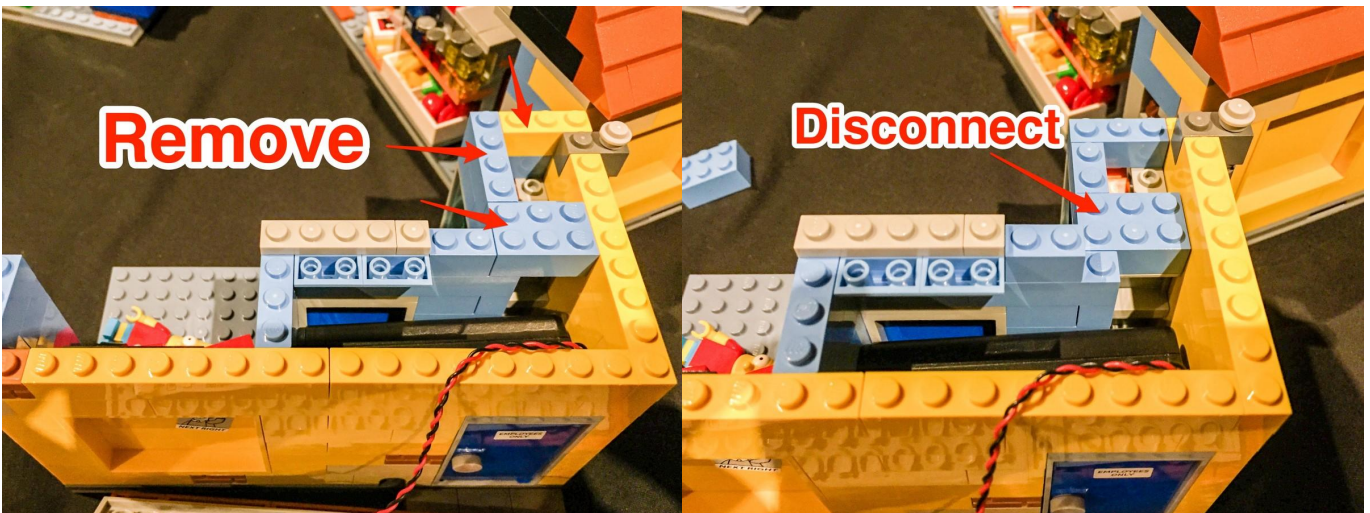
61.Take one 30cm connecting cable and connect it to the left port of an LED strip light (striplight#1). Connect the battery cable to the right port of this strip light.



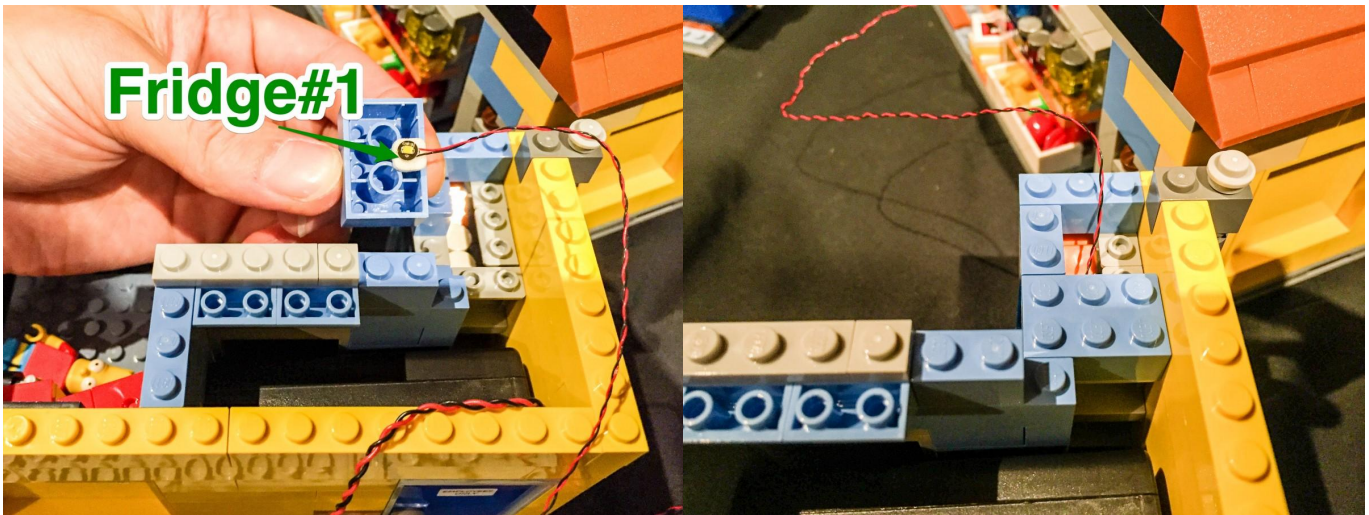
62. Take the roof of this section and flip it over then connect/stick the strip light in the following position. Ensure that you loop the 30cm cable above and then underneath the strip light so that it is not visible from the inside of the store.



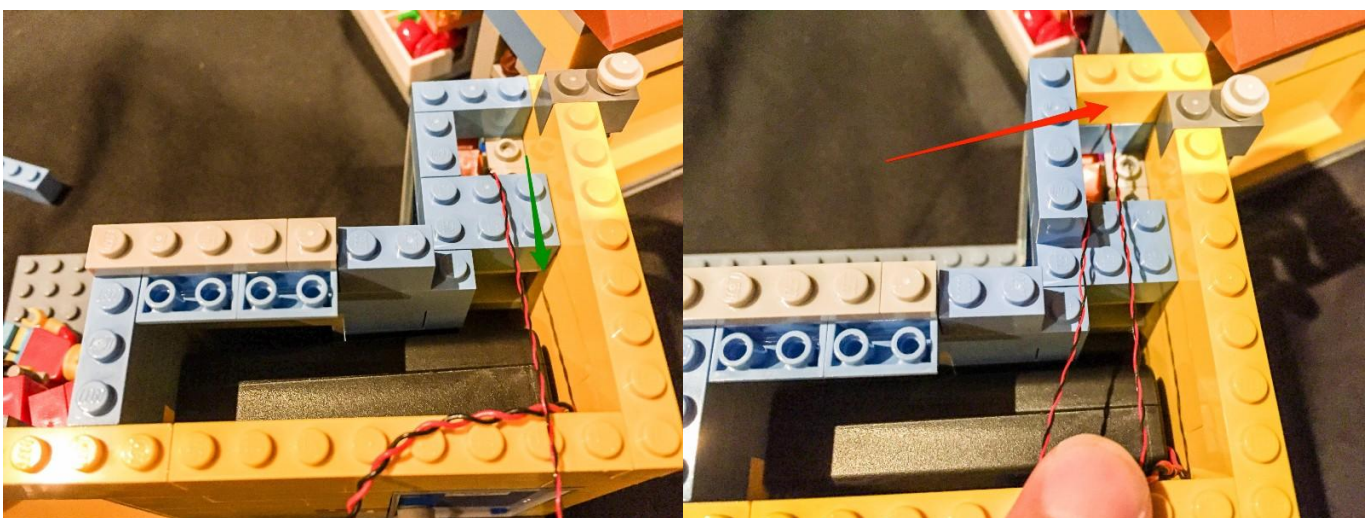
63. We will now install a light to the fridge of this section. Remove the following pieces to allow us to get to it.

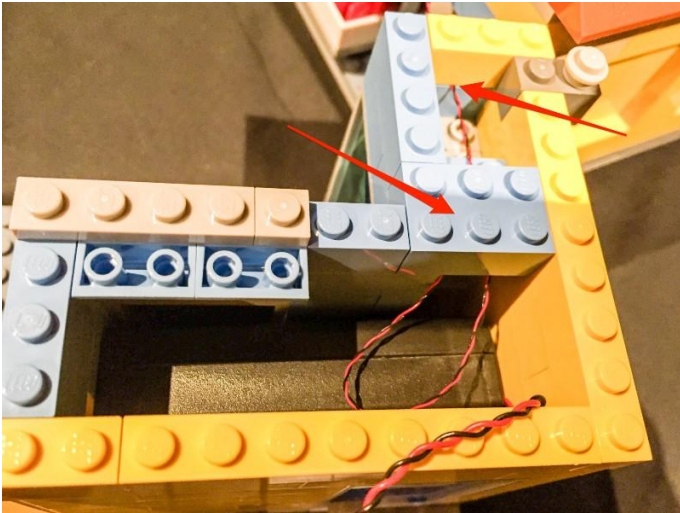


64. Take 1 of the White 30cm Dot Lights and attach it to the bottom of the 2 x 6 brick using one of the provided double sided adhesive squares. Stick it in the following position as pictured below. We will identify this light as fridge#1. Reconnect this brick with the cable facing upward.



65. Secure the cable by pulling it over the blue 2 x 6 brick and then forming a loop, then pushing it back up and securing it underneath the yellow 1 x 3 brick and the blue 2 x 6 brick. While doing this ensure that the connector part is on the other side of the wall underneath the yellow 1 x 3 brick.





67. Re-attach the roof as follows ensuring that the 30cm cable is pulled between the walls and out the same side as the cable from fridge#1.



68. Use the removal tool to remove the main roof section at the following sections. Carefully use the tool to lift the roof away from the yellow walls a little bit at a time to ensure the entire roof disconnects easily in one piece.



69





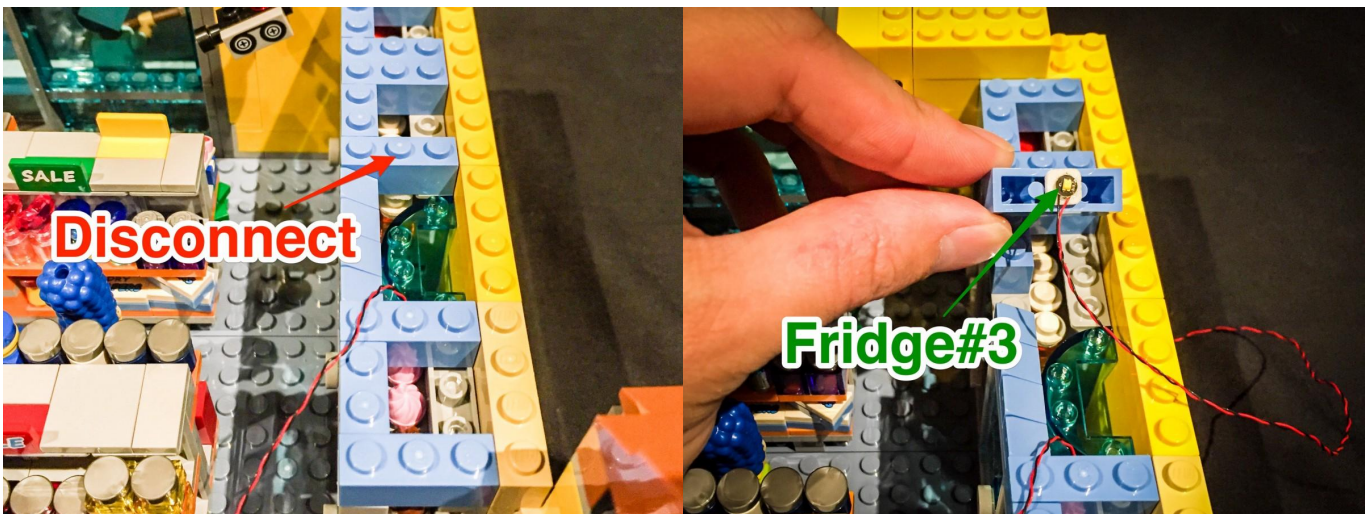
71. We will continue to install lights to the next lot of fridges. Start by removing the following pieces.



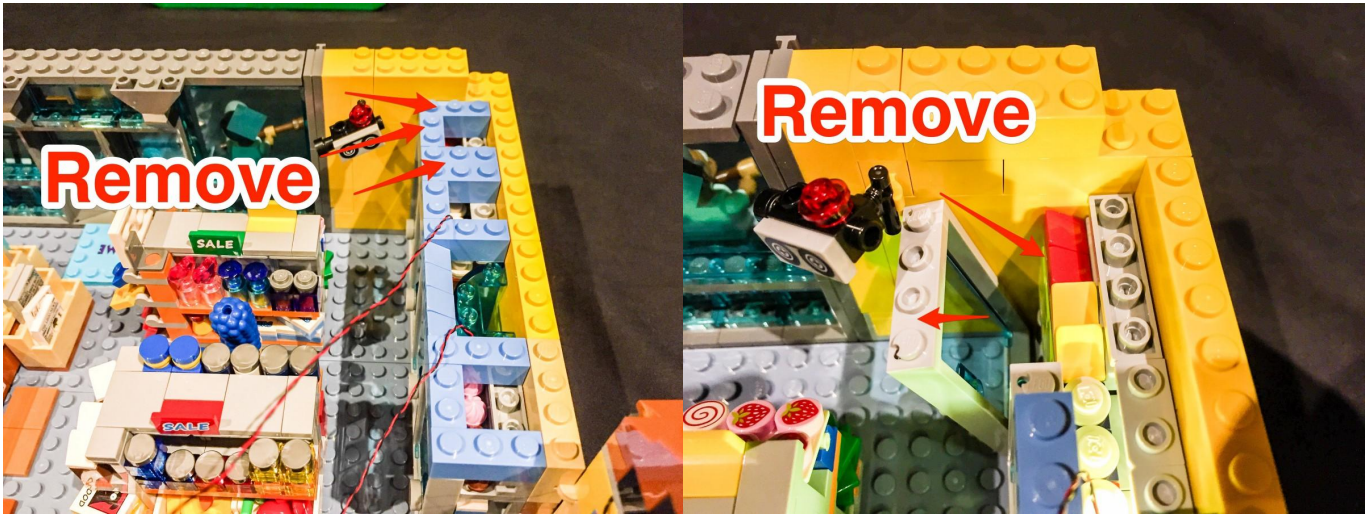
72. Take another White 30cm Dot Light (fridge#2) and attach it using another adhesive square in the following position. Reconnect this brick with cable facing up.



73. Install another White 30cm Dot Light for fridge#3 using the same method as above and following these images.



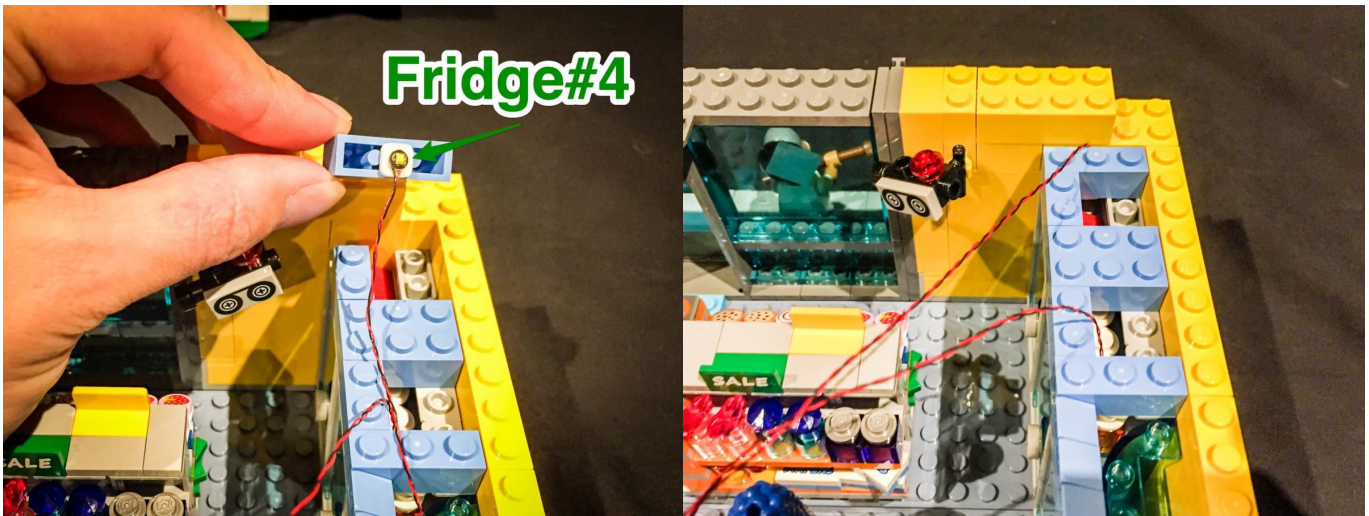
74. Before we install the 4th fridge light, we need to remove one of the red piece items off the top shelf to prevent the light from being blocked out. Remove the following pieces to get to it.



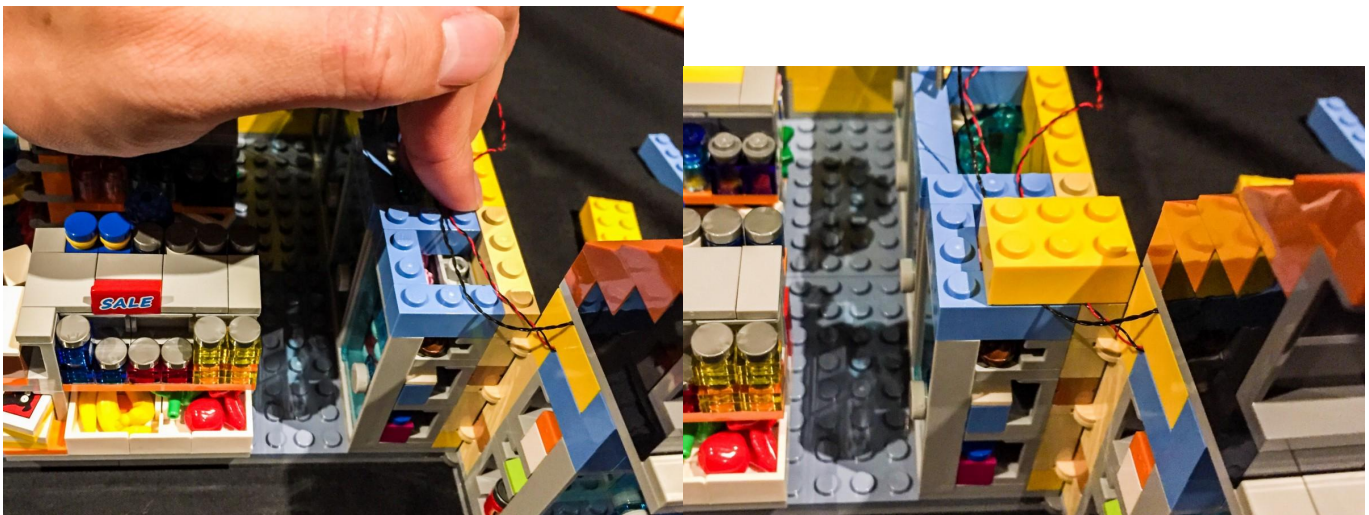
75. Remove the red piece on the far left and then reconnect the shelf.



76.Reconnect the blue pieces we removed while taking another White 30cm Dot Light and install it in the following position (fridge#4).



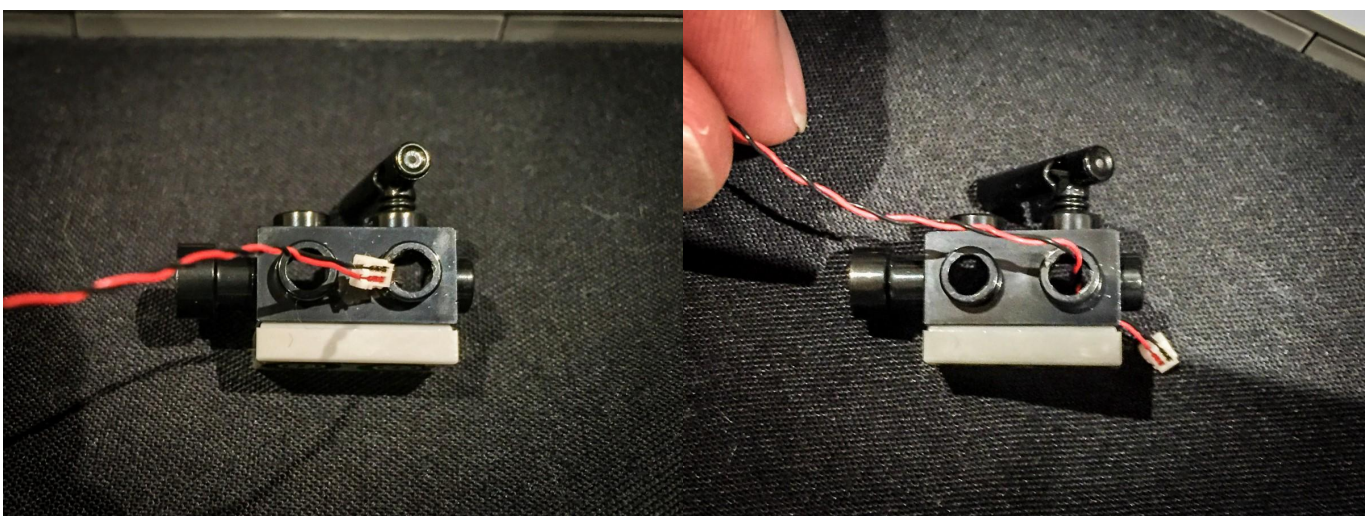
77.Pull the 30cm cable and cable from fridge#1 across and secure them down by connecting back the yellow 2x3 brick over the top ensuring the cables are laid in between studs.

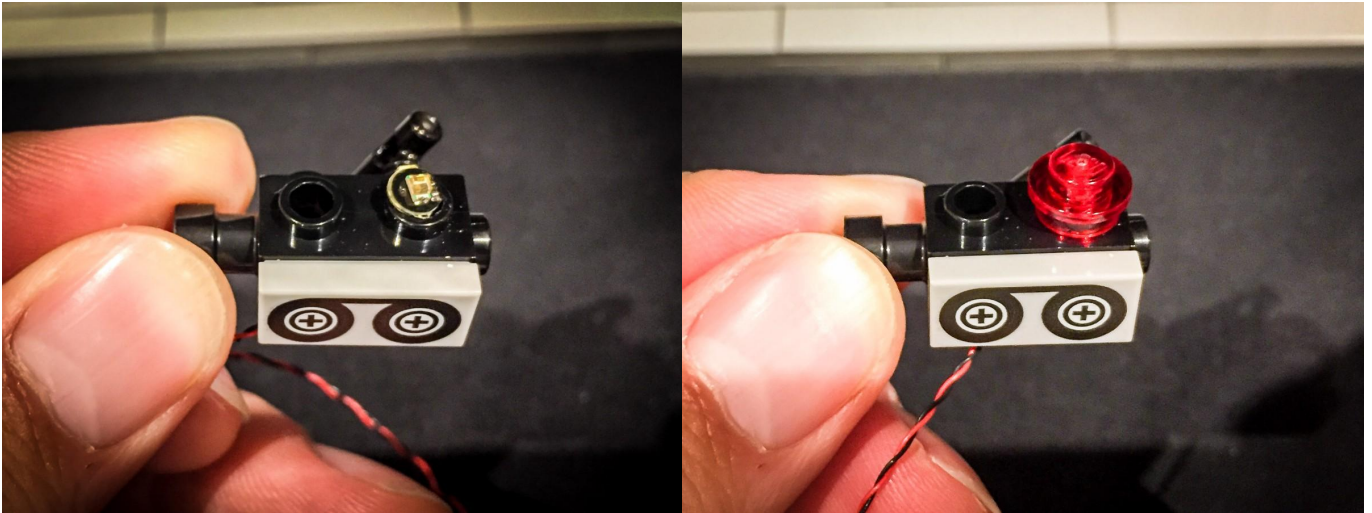


78. We will now install a flashing light to the Video camera. Remove the video camera from its connector and place it down.



79. Take 1 Flashing Red 30cm Dot Light and using the connector end of the cable, thread it through the hole at the top back of the camera. Pull it through from the bottom of the camera all the way until the LED component part is sitting flat against the top of the hole. Ensure that the LED component is facing the correct way up. Secure the LED in place by connecting one of the provided transparent red round pieces. We will identify this as video#1.

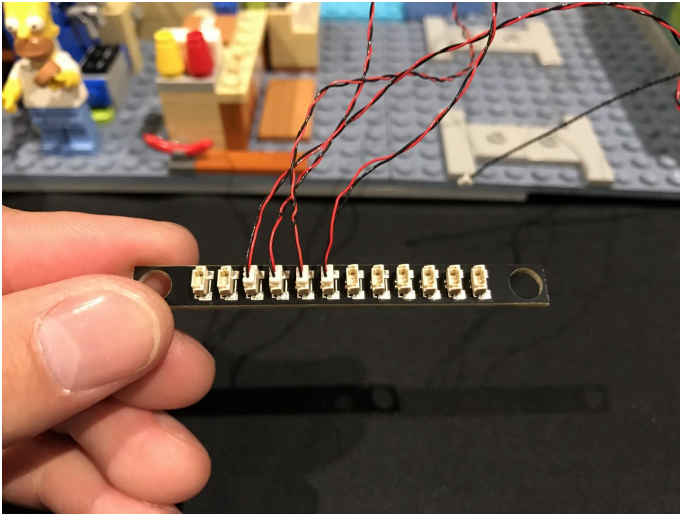




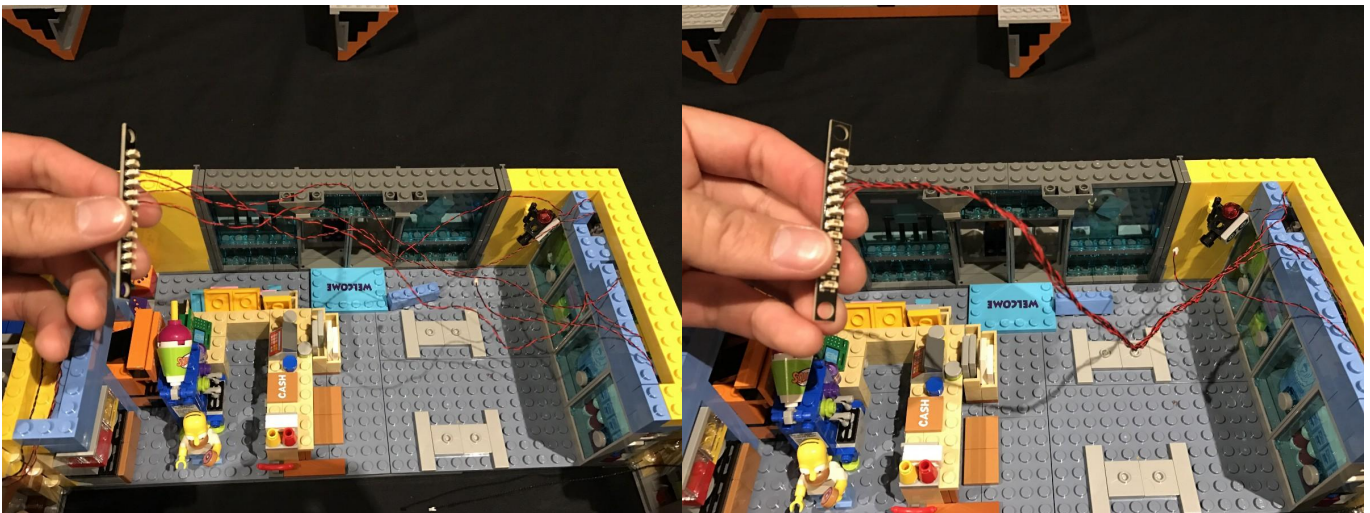
81. Connect the video camera back to its original position then secure the video camera cable in place by connecting the blue 1 x 2 piece over the top.



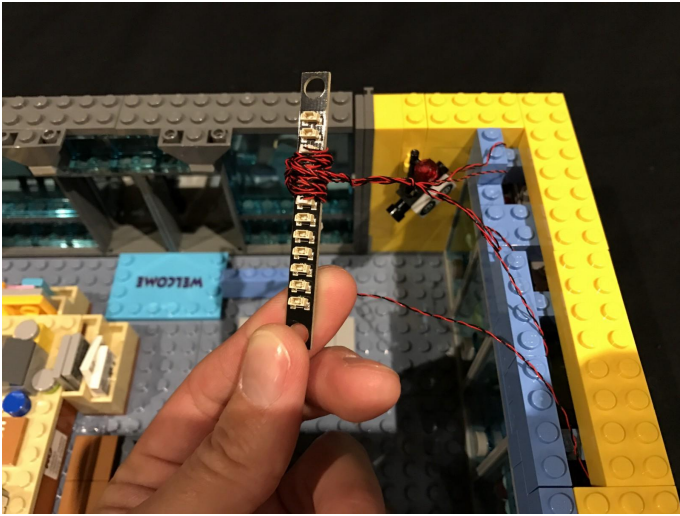
82. Take the cables from video#1, fridge#2,, 3 and 4 and connect them all to one of the 12-port expansion boards.



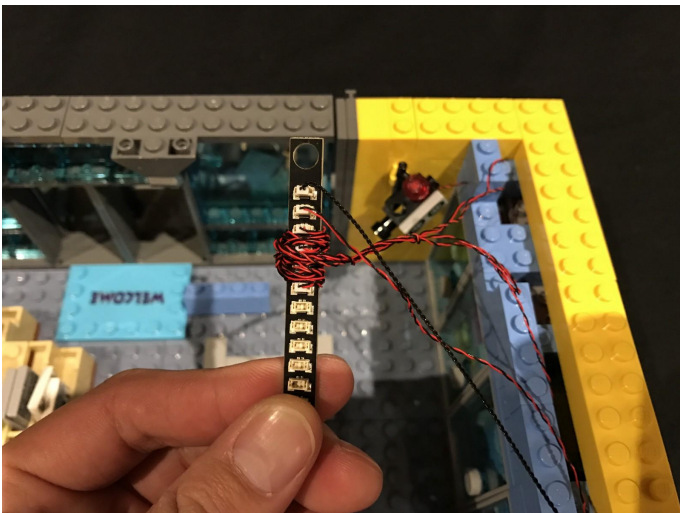
83. Group the 4 cables together and twist them around each other so that they all form one large cable.



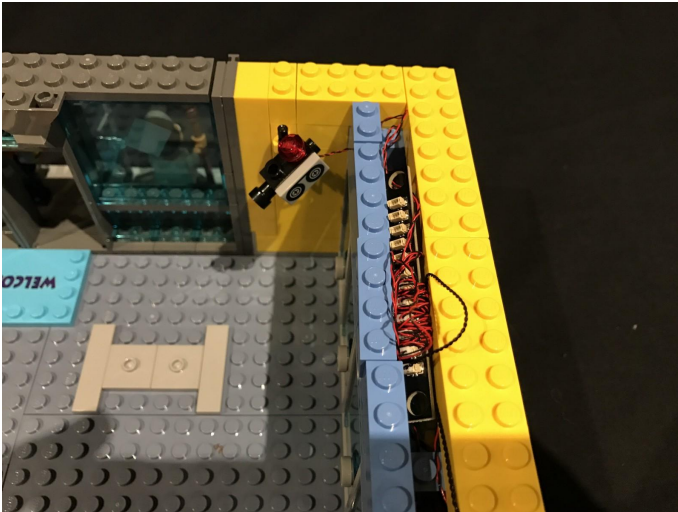
84. Wind the cables around the board until you have about 8–10 cm of slack.



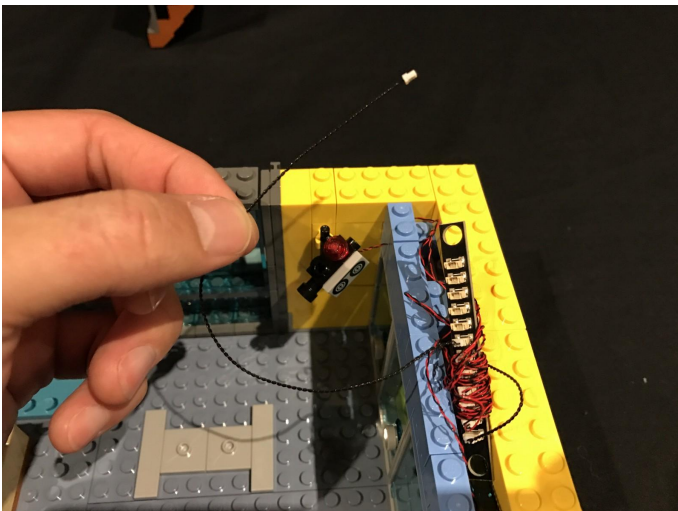
85. Connect the 30 cm cable and cable from fridge#1 into the next available ports on the expansion board.



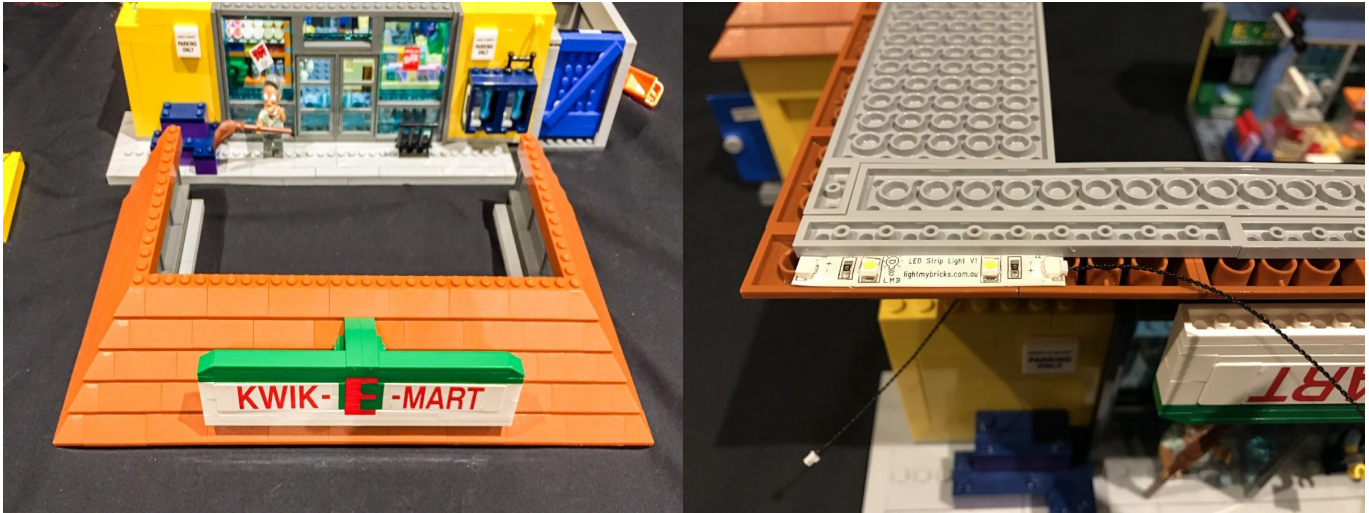
86. Wind the rest of the cables around each the expansion board as much as possible and then squeeze the expansion board on top of the fridges in between the blue and yellow bricks. Ensure that the available ports are facing toward video#1. Then reconnect all the bricks surrounding the fridge.



87. Take a 15cm cable and connect it into a spare port on the expansion board.



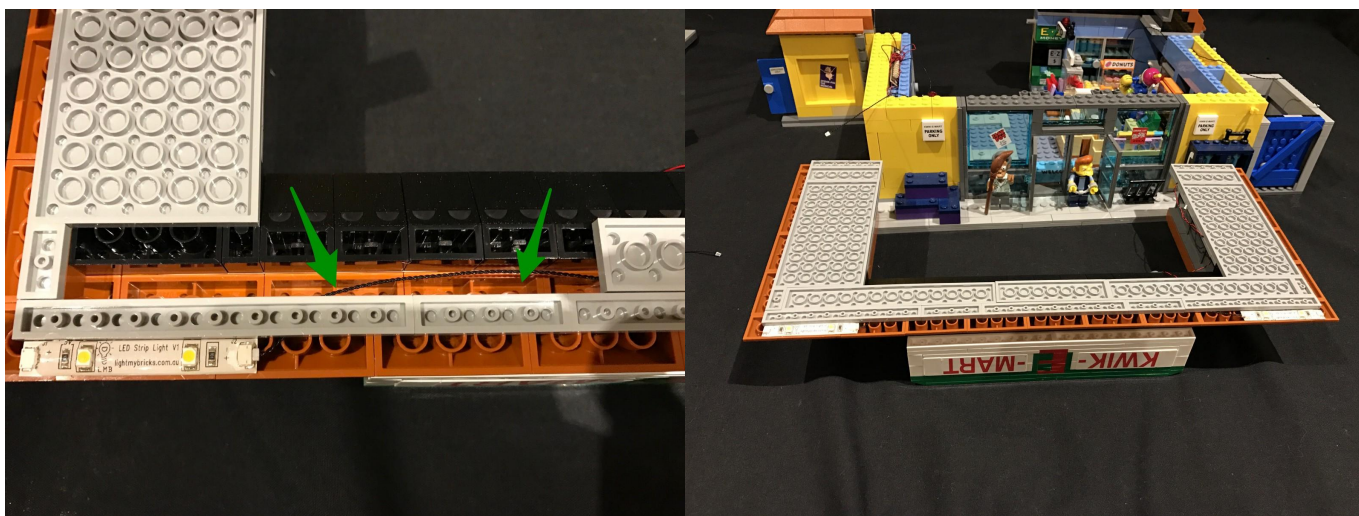
88. We can test our current lighting circuit as you go by simply turning on the battery pack. This is a good idea as you want to ensure all is working before you connect back bricks into original positions. Let's turn it on to see how it looks so far.



89. Take another strip light (striplight#3) and stick it to the following position on the right side of the roof (using the strip light's adhesive backing). Then connect to the other end of the 30cm cable from striplight#2 into the left port.



90. Hide the 30cm cable underneath the grey tiles in the spacing underneath the roof.

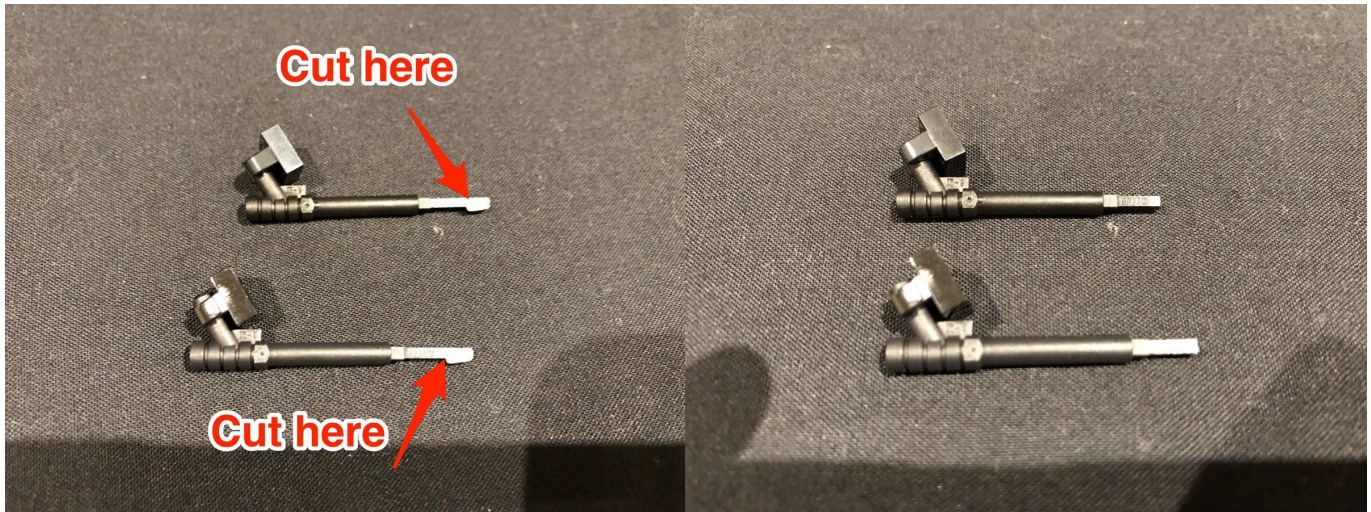


91. We will now install the 2 billboard lights which point to the “Kwik-E-Mart” sign.

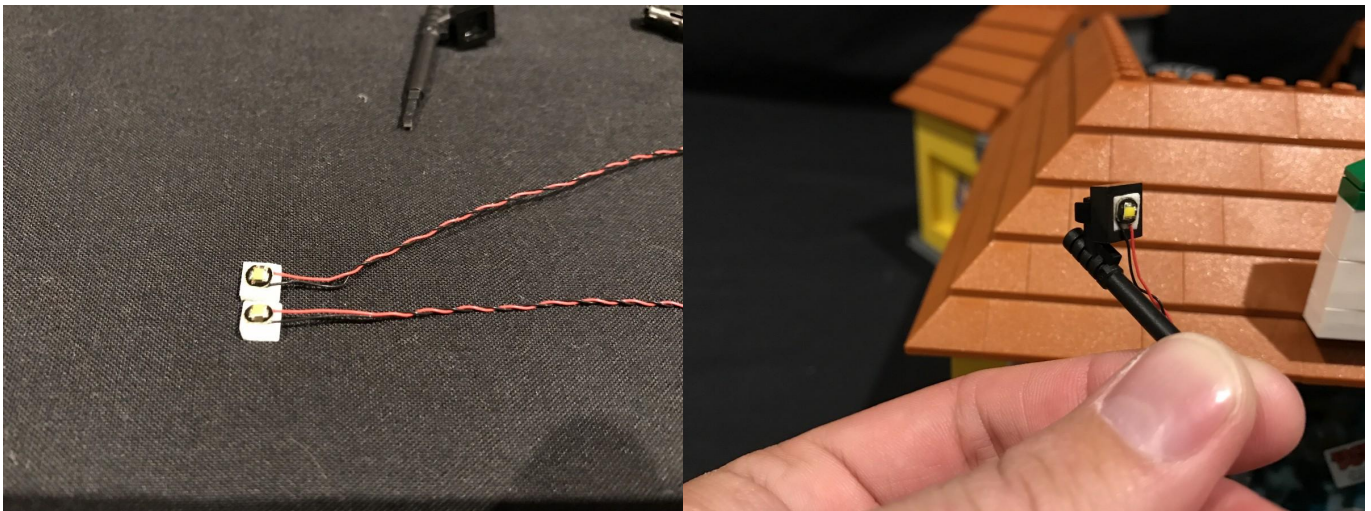
Locate the following pieces which have been included in this set.



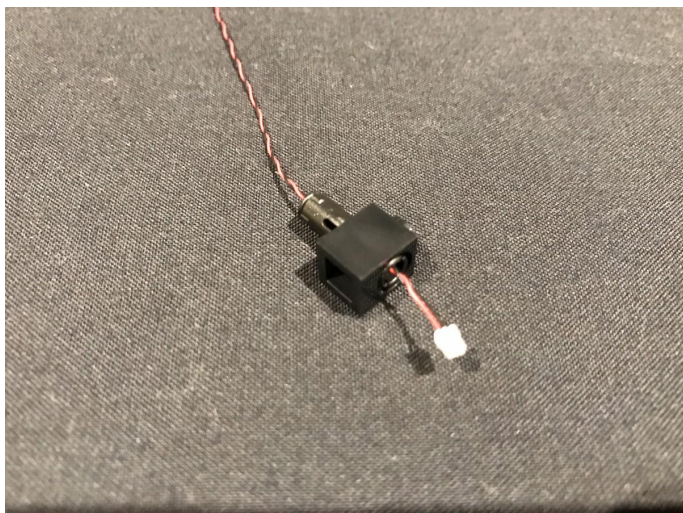
92. Connect the 1x1 plates with clips onto each of the spear gun pieces then using some scissors snip off the pointed end at the following position. YES, we will need to cut this piece in order for it to clip in securely to the roof.



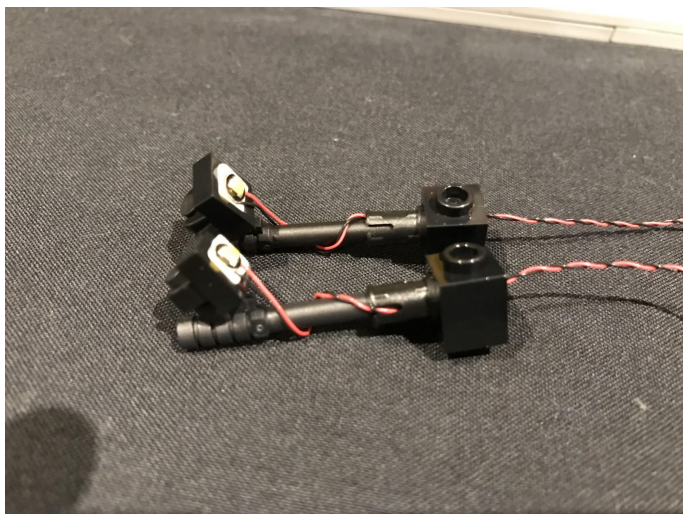
93. Take 2x White 30cm Dot Lights and stick the LED to self adhesive squares then stick the other ends of the LEDs to the 1x1 plates with clips.



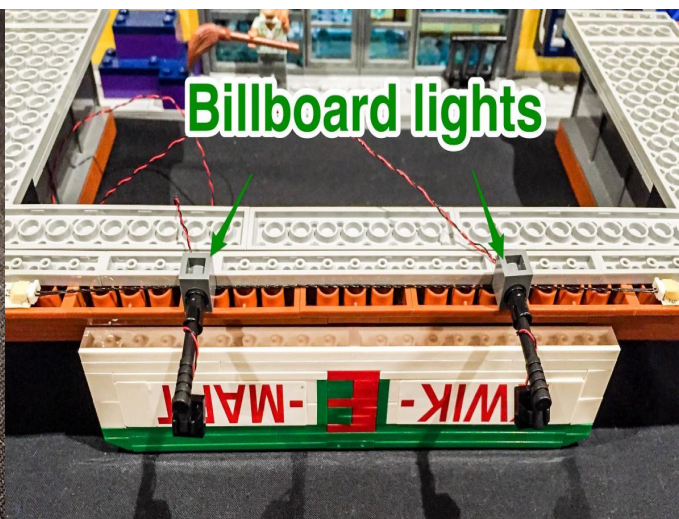
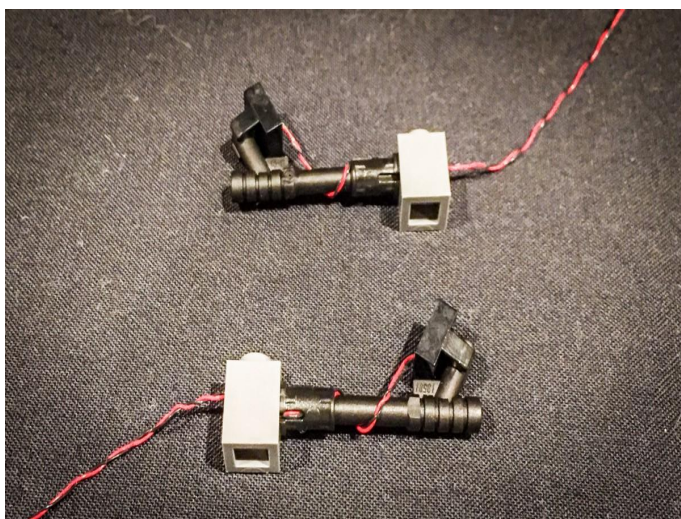
94. Connect the technic pins into the 1x1 bricks with holes, then thread the other end of the one of the Dot Lights through the pin and out the other side of the 1x1 brick. Repeat this for the other technic pin and brick so that you have two billboard lights.



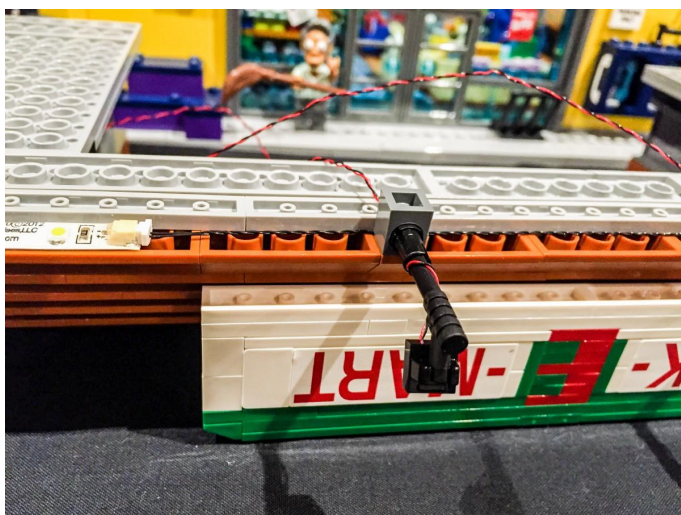
95



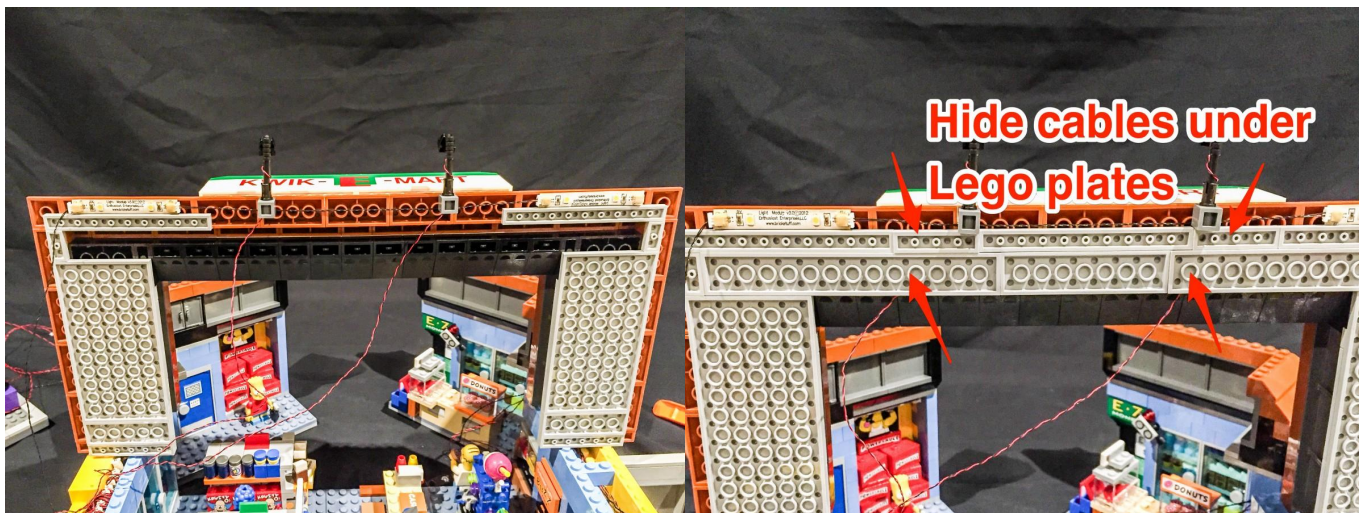
96. Take the 2 billboard lights and connect them to the following positions under the roof.



97



98. Lift the main section so that underneath of the roof is facing us. Hide the cables from the billboard lights underneath the grey plates by first removing them and then reconnecting them over the cables ensuring they are laid in between studs.

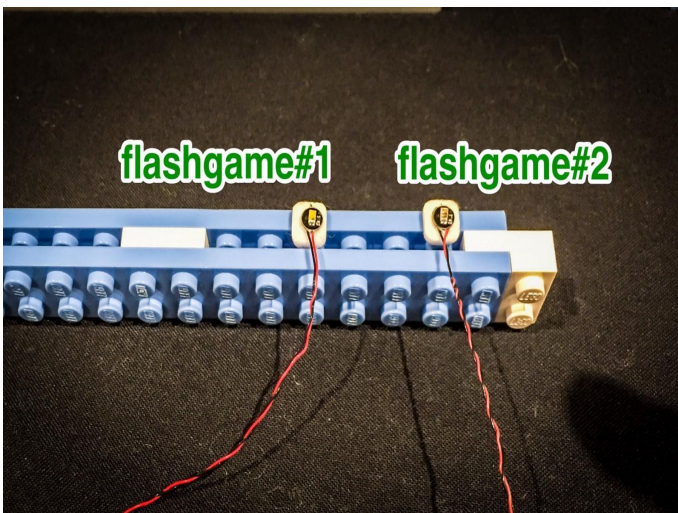


99. Let's move on to the next section of the building. Remove the following bricks and then disconnect the long blue section which connects across the length of the wall.





101. Take the long blue section and turn it over with the white brick facing toward the right. Take 1x Flashing White 30cm Dot Light and 1x Flashing Red 30cm Dot Light and stick it to the following positions using the provided self adhesive squares. It does not matter which one is on the left or right. We will identify these as flashgame#1 and flashgame#2.



102.Reconnect the long blue section back to its original position ensuring that the cables are facing the same way as pictured.



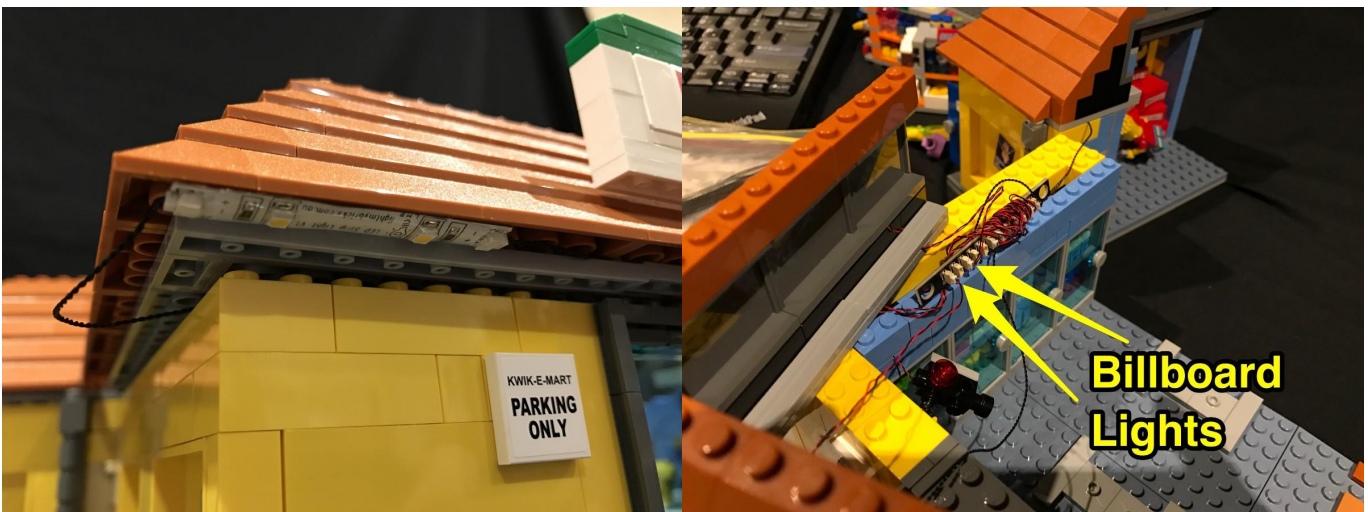
103.Take the 2 cables from the flashgame#1 and 2 and pull them up towards the other end of the store. Take another 30cm cable and lay the cable along side the other 2 cables. Leave about 3cm of free cable sticking out the front. This will be used to connect to striplight#3 later.



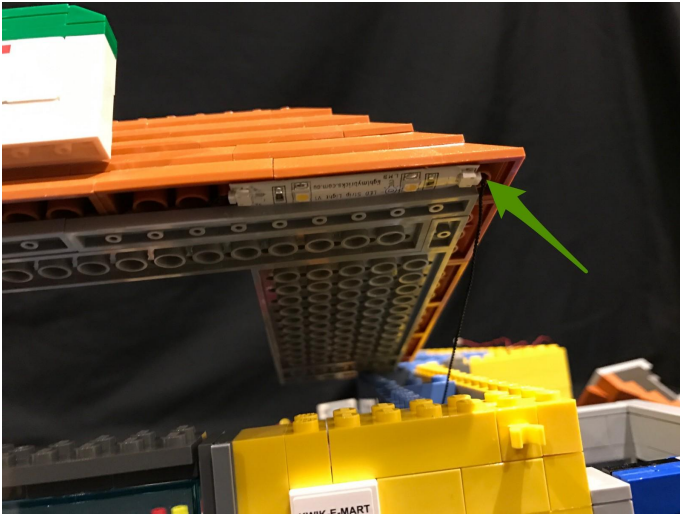
104. Secure all 3 cables down by reconnecting all the blue and yellow pieces we removed earlier. Ensure that the cables are laid neatly in between studs.



105. Connect the roof lights to the rest of the circuit by first placing the main roof section on top of the building and connecting the 15cm cable cable from 12-port expansion board to the left port on lightstrip#2. Then connect the 2 cables from the billboard lights into the expansion board.



106. Connect the 30cm cable from the right side of the building (which we left 3cm free) to the right port on striplight#3.



107. Reconnect the main roof section back to the rest of the building ensuring that all cables are pushed behind their lights and over the front wall. This part is a little tricky and may take a few goes to ensure all cables are hidden behind and the roof is fully connected to the top of the walls. Be patient, you will get there.

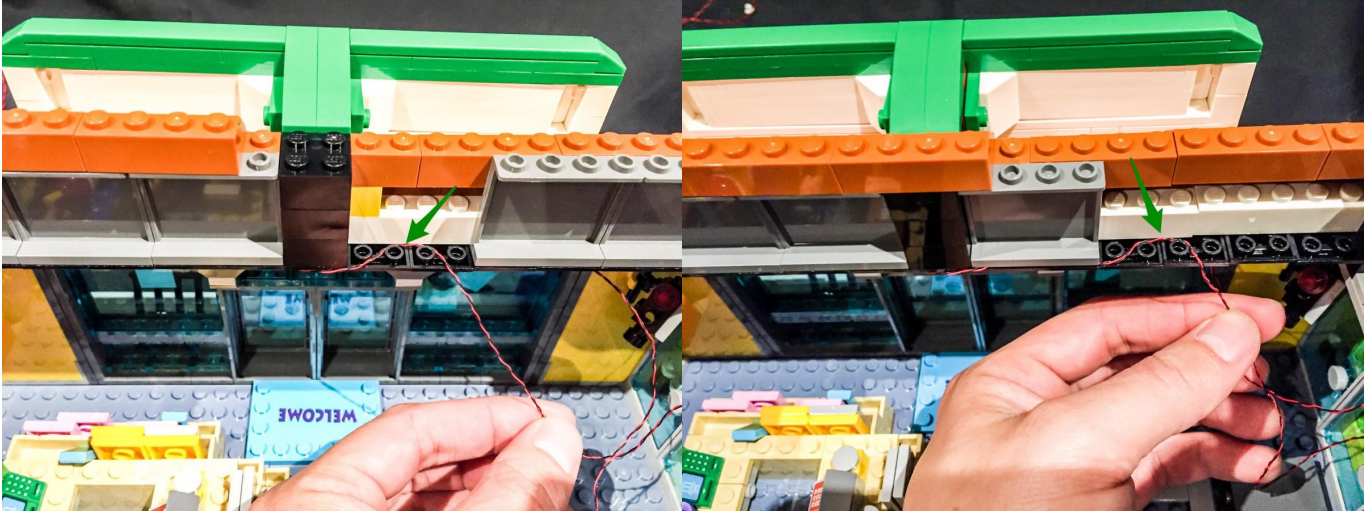




109. Turn the building around. You will notice messy cables from the billboard lights hanging down from the other side.



110. We will hide these by first removing the grey walls of the roof, laying the cables in between the black studs below, and then reconnecting the grey walls over the top. Do this as much as required to ensure cables are neatly secured and out of the way.



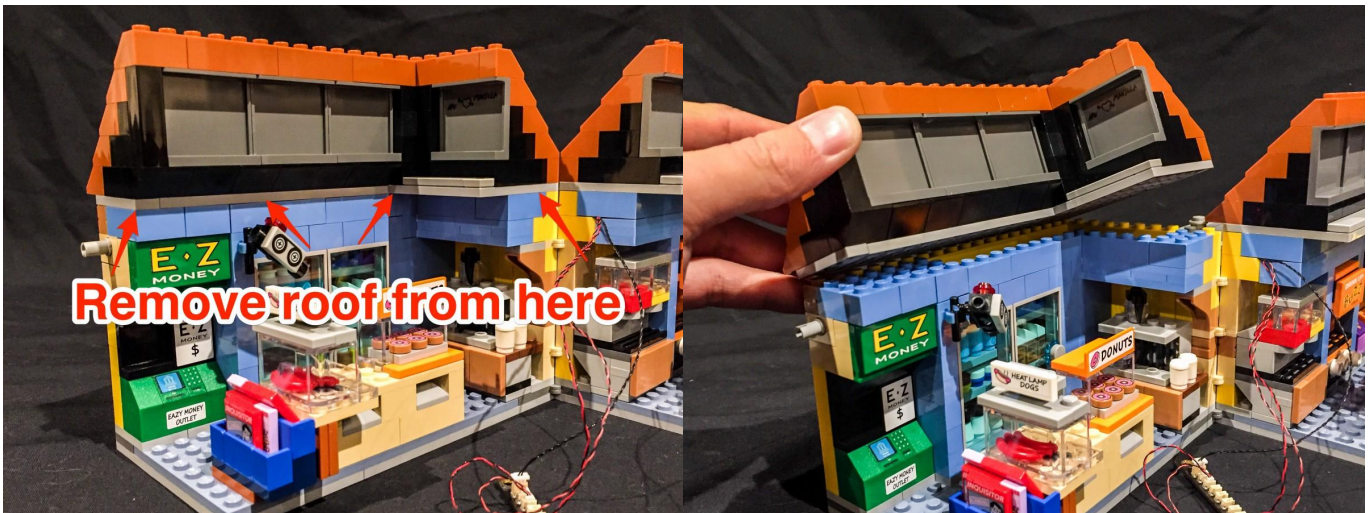
111



112. Now let's turn on the battery pack to test the lights we have just installed.



113. Let's install lights to the left back section. Remove the roof using the removal tool the same way we removed the other roof sections.



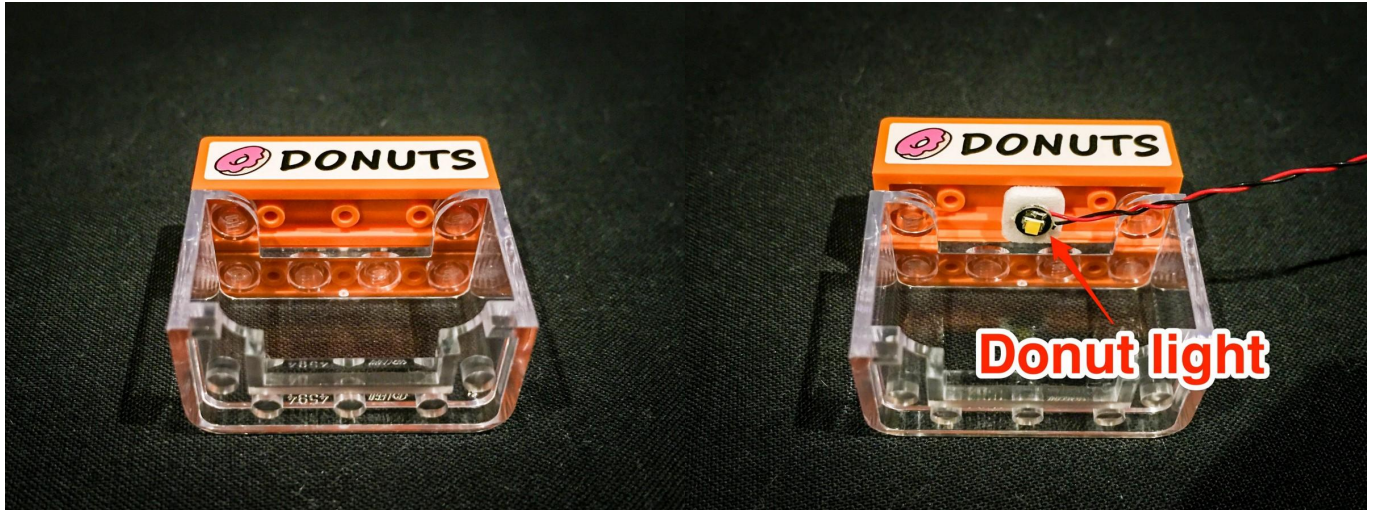
114. We will start with the 2nd video camera. Remove this section and install another Flashing Red 30cm Dot Light (video#2) the same we did for video#1. Secure this LED using another provided transparent red piece. Then reconnect the video camera back to its original position. We will connect the other end of the cable later.



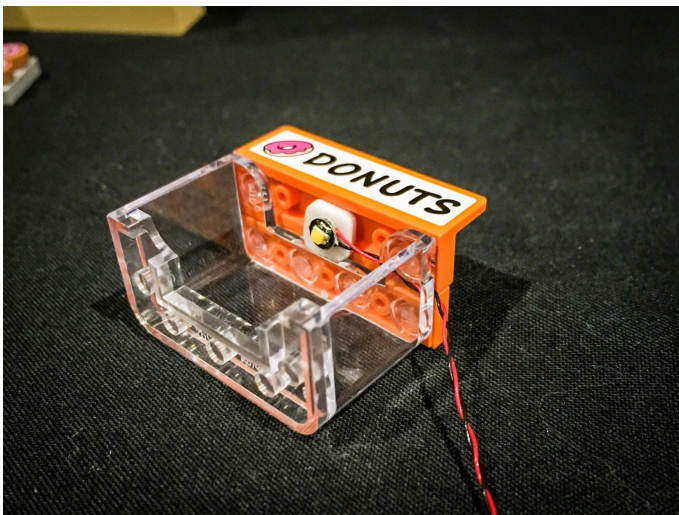
115. We will now install lighting for the donut stand and hotdog display. First remove this whole section from the base of the shop.



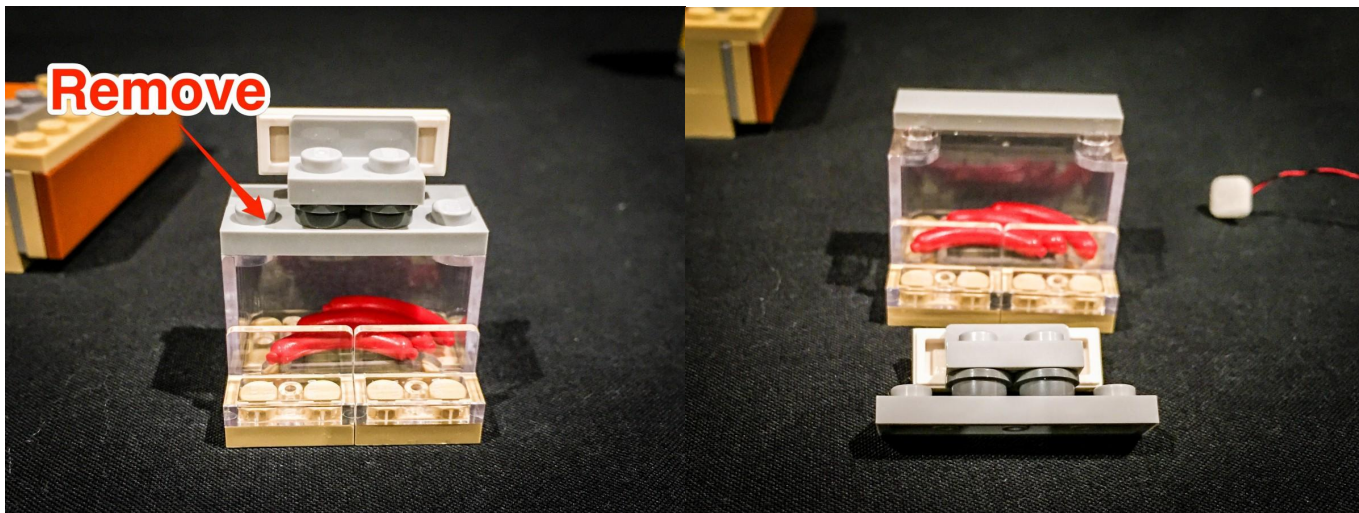
116. Detach the donut section (glass section) from the counter and then install a White 30cm Dot Light underneath the orange donut sign in the following position. Stick this LED using one of the provided adhesive squares.



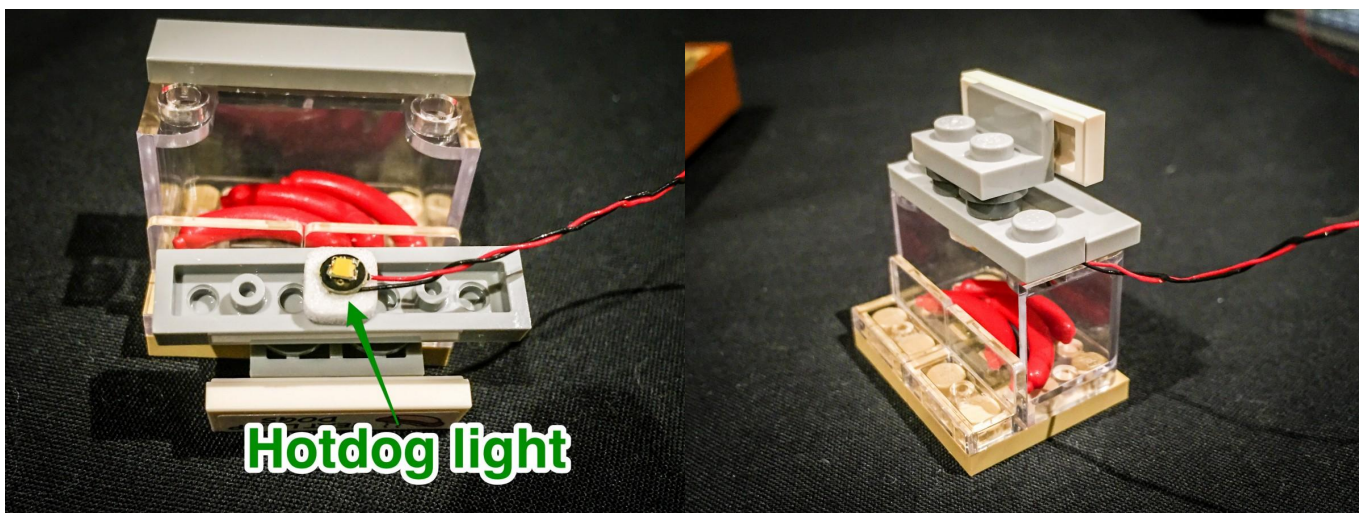
117. Secure the cable by pulling it toward the right underneath the donut sign and in between the studs of the glass piece.



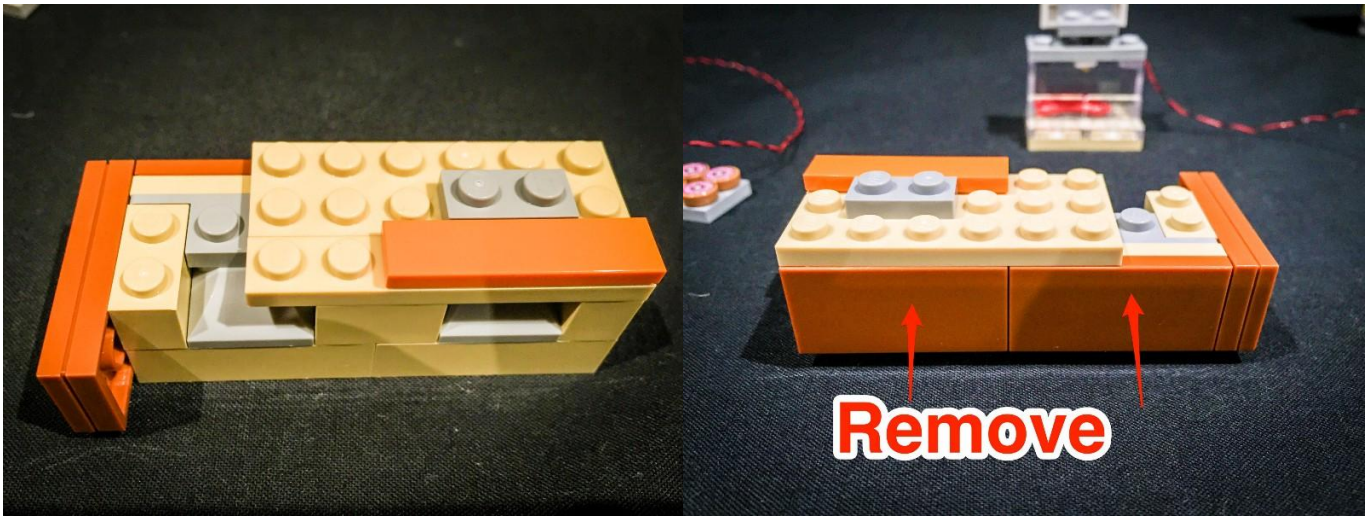
118. Detach the hotdog display (at the cream plates) from the counter and remove the grey 1 x 4 piece from the top back.



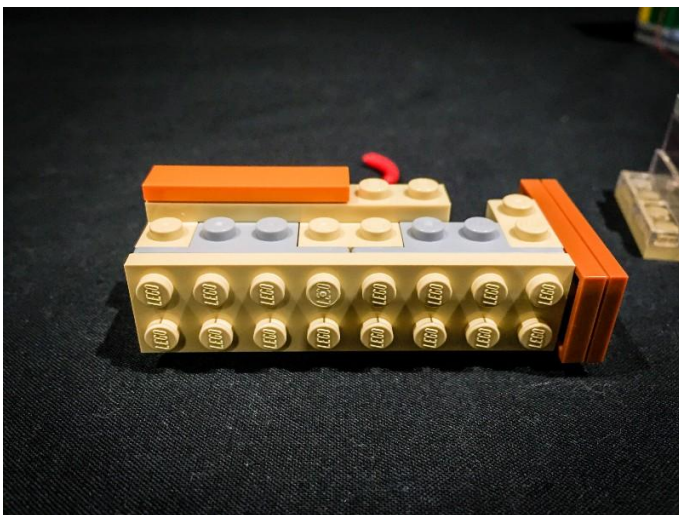
119. Using another adhesive square, stick another White 30cm Dot Light to the bottom of this piece in the following position.



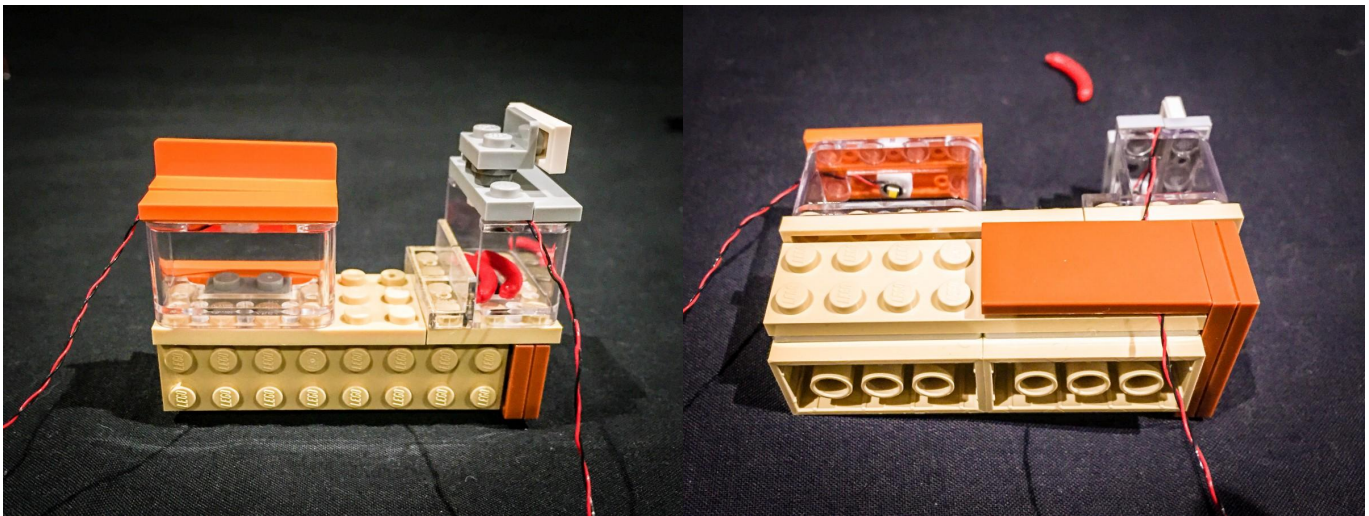
120. Turn the counter over and remove the 2 orange plates from the back of the counter.



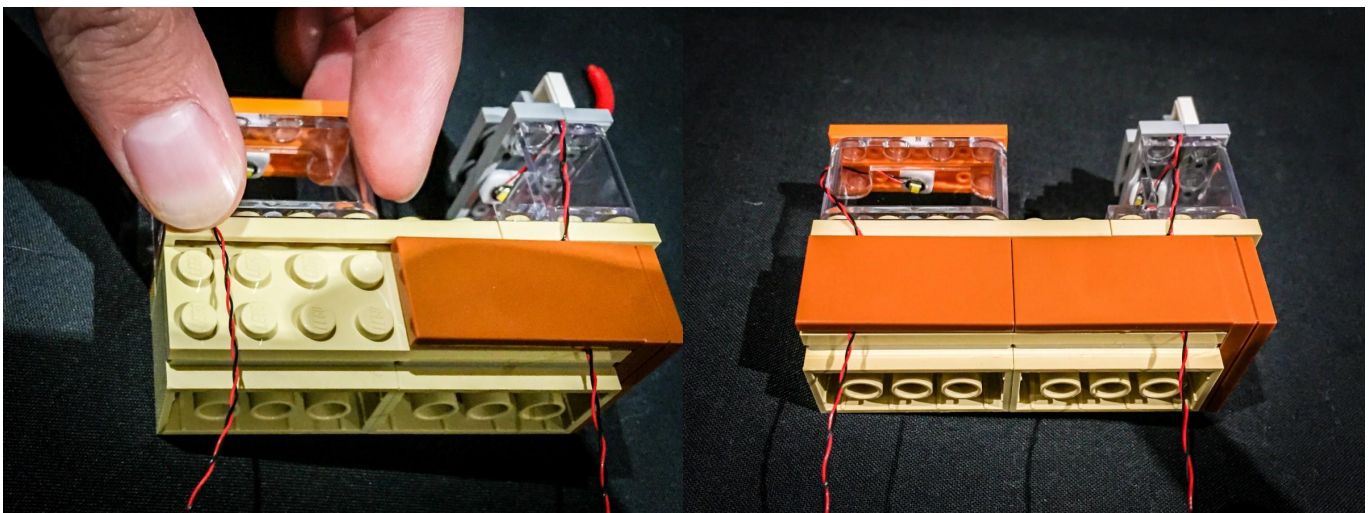
121



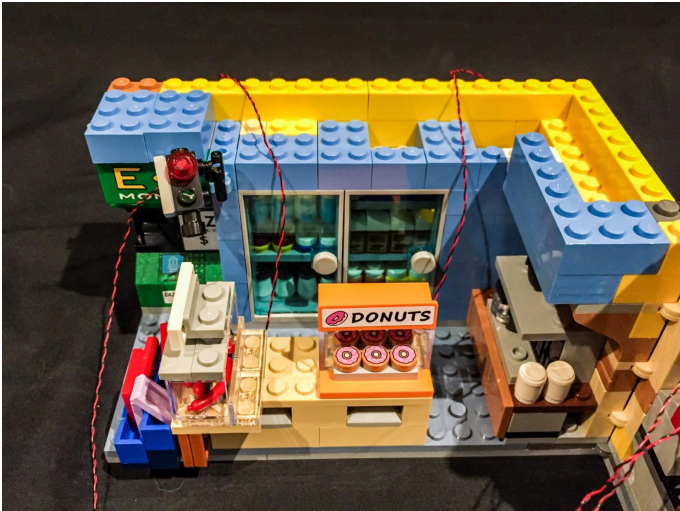
122.Reconnect the hotdog display and donut stand to the counter, pull the cables from the lights down in between studs and then reconnect the orange plates over them to secure them down.



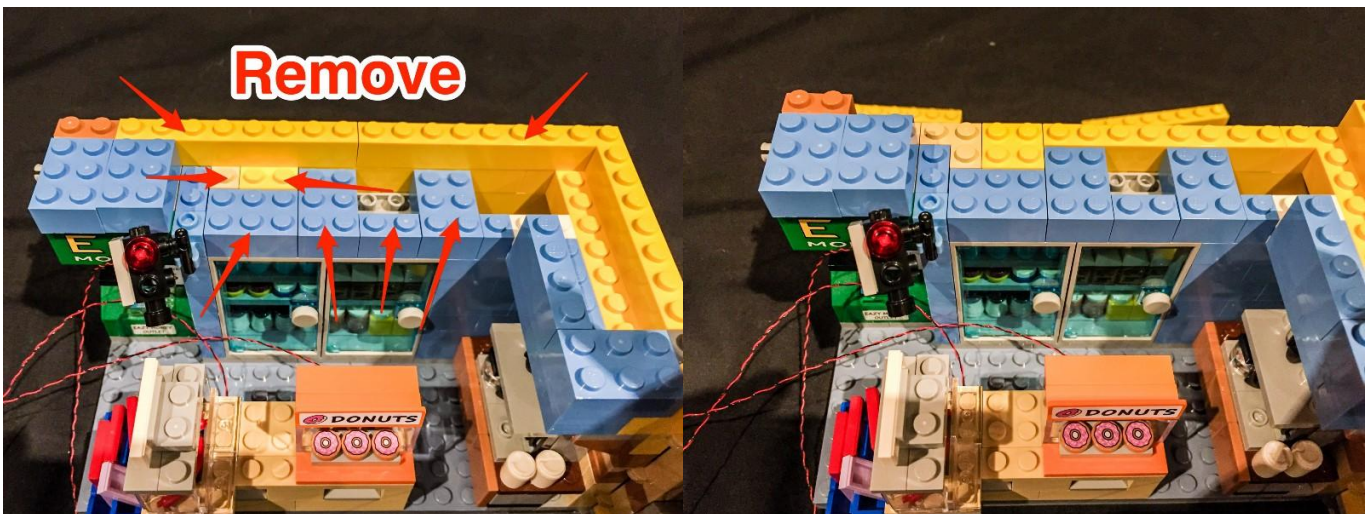
123



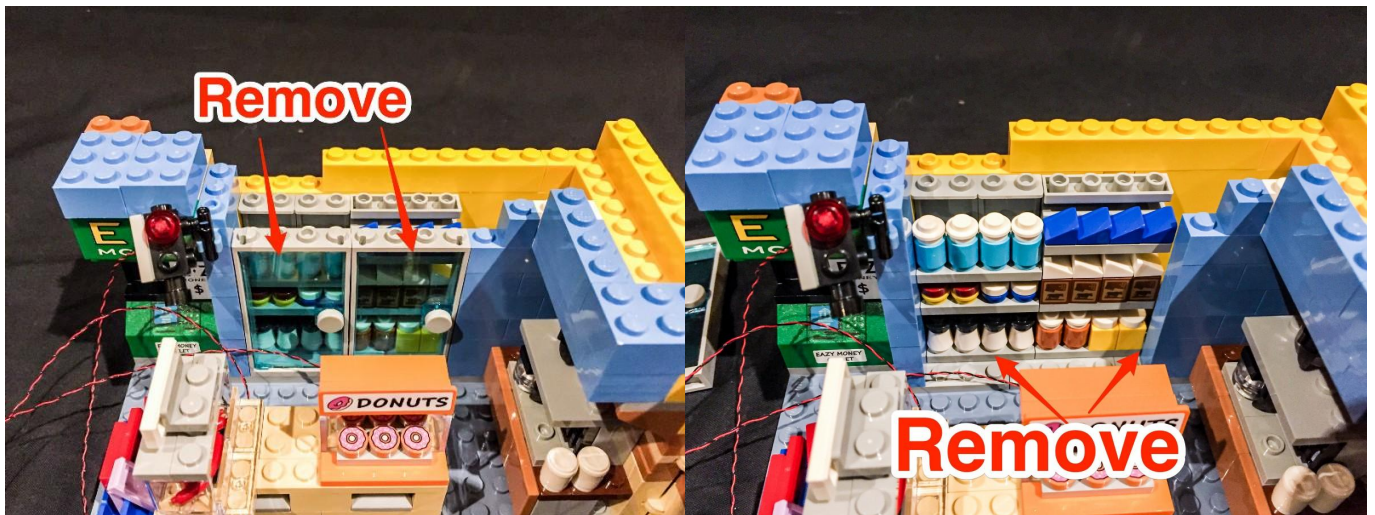
124.Reconnect this whole section back to the base of the shop



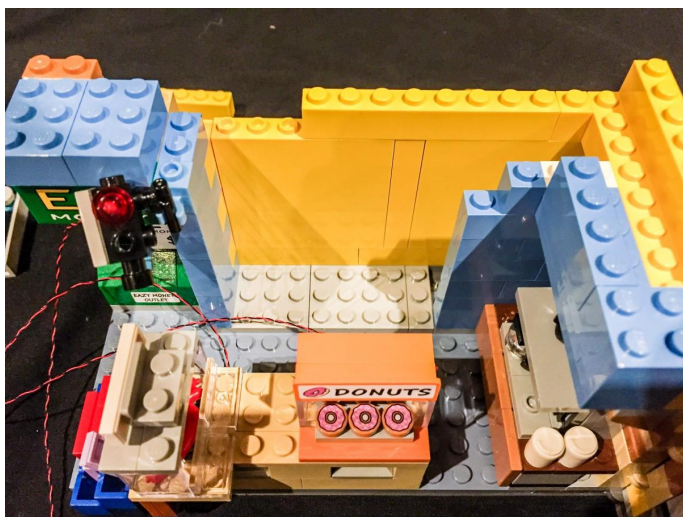
125.We will be laying the cables from the hotdog and donut lights down and then underneath the 2 fridges behind. Start by removing the following pieces to then allow us to remove the fridge doors and shelves.



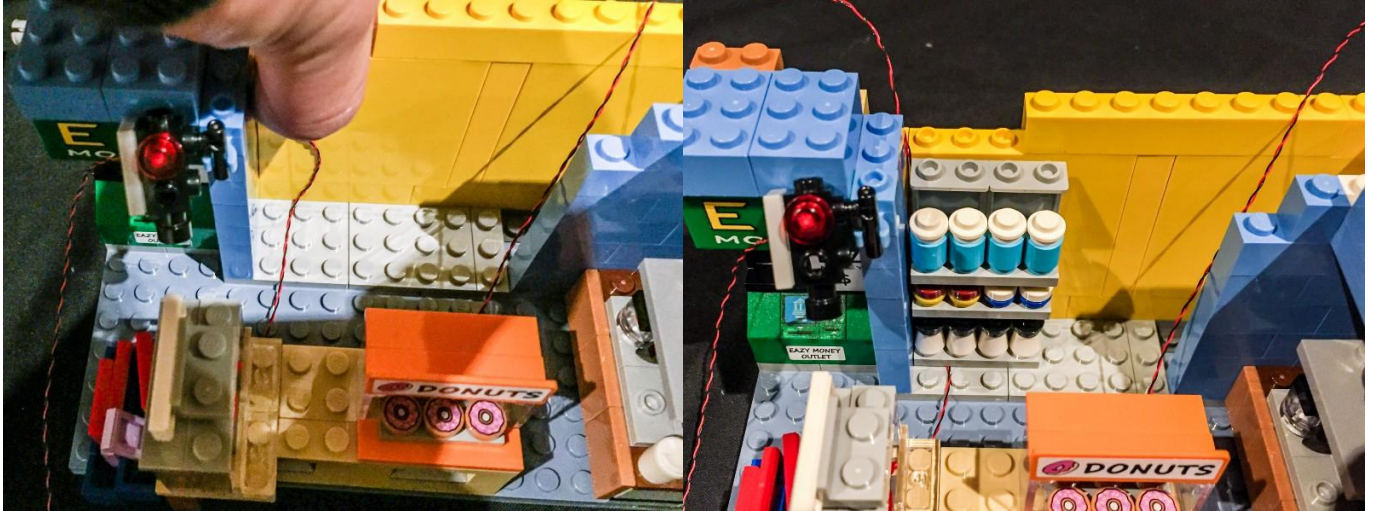
126



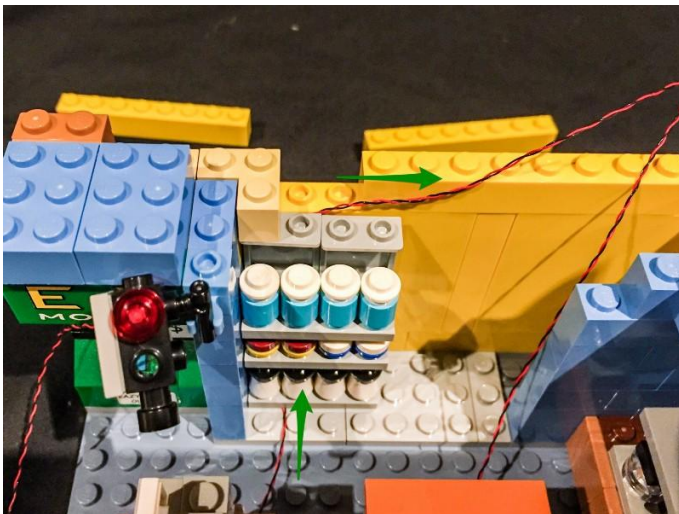
127



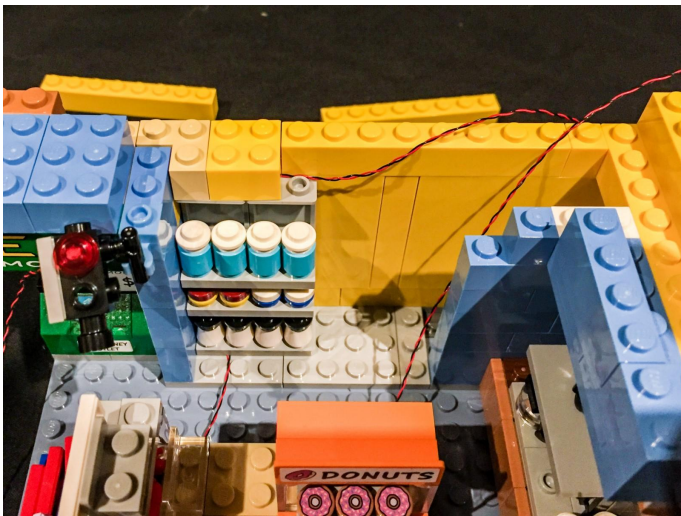
128. Start with the hotdog light cable and pull it toward the back in between the studs of the grey base plate and then connect the shelves over the top ensuring that the cable is pulled up from behind it and then to the right.



129



130. Secure the shelves by reconnecting the cream and yellow piece. Be careful and ensure that the cable still remains in between studs.



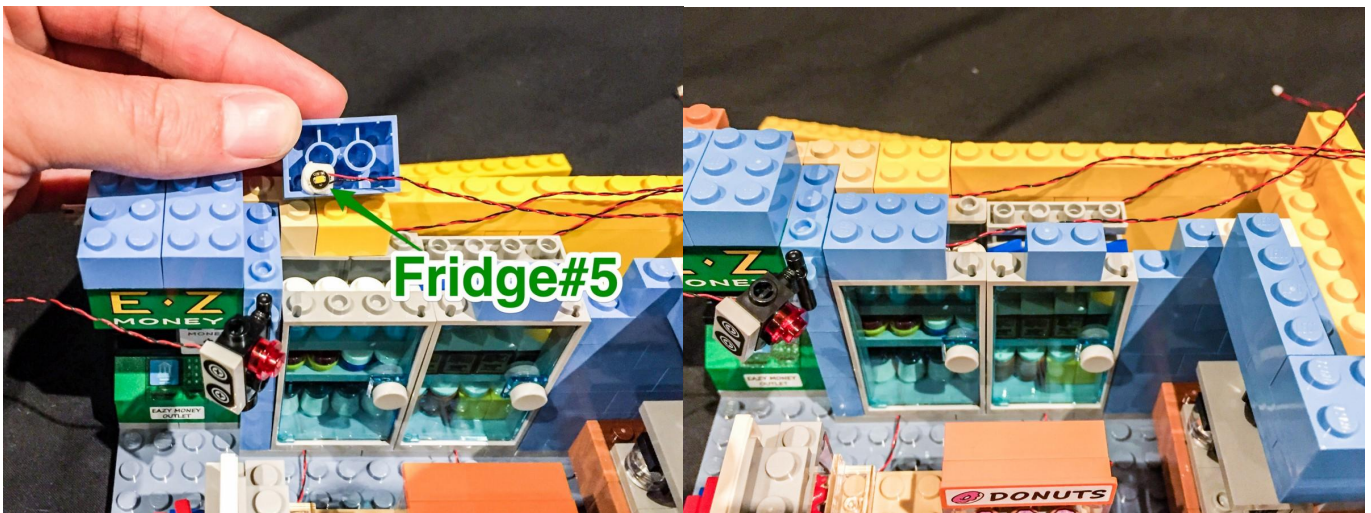
131. Do the same for the donut light cable, ensuring that the cable is laid in between grey studs.



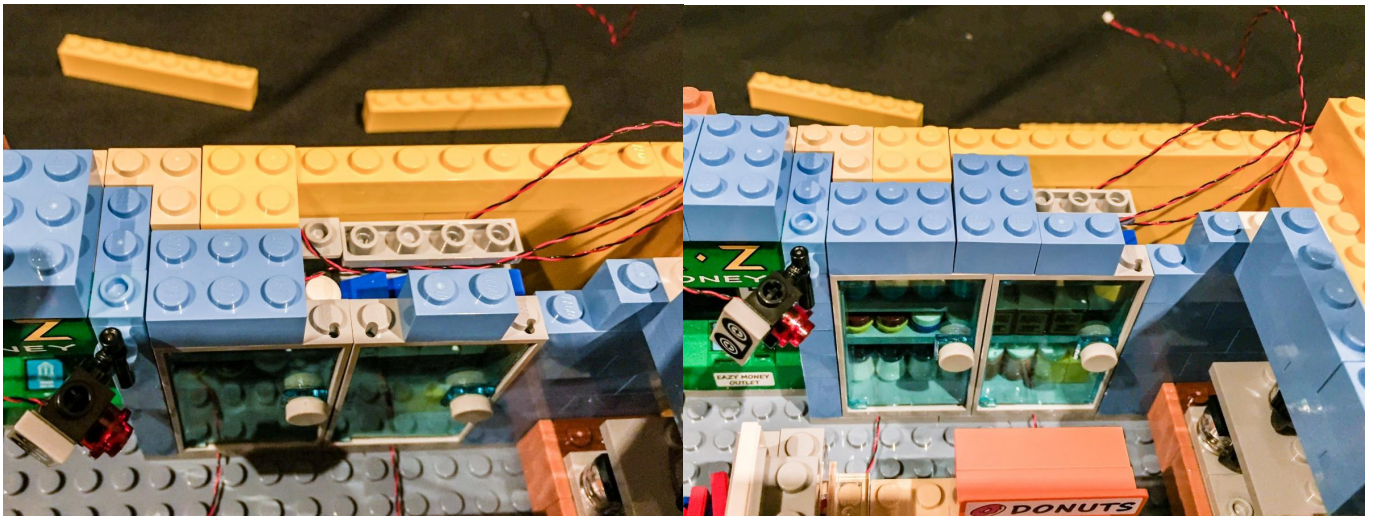
**132.Reconnect the fridge doors and blue 2 x 6 piece and 1 x 2 piece.
Take the left 2 x 6 piece and turn it on its side.**



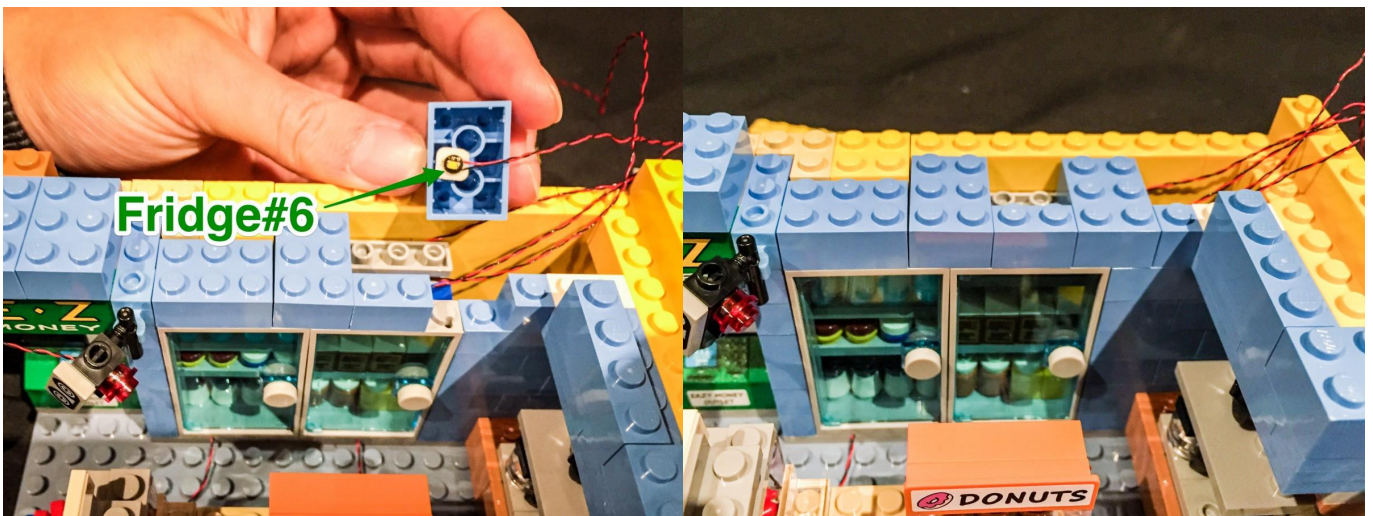
133.Take another White 30cm Dot Light (fridge#5) and stick it using an adhesive square in the following position before reconnecting this piece back . Ensure that the cable is pointing toward the right as pictured below.



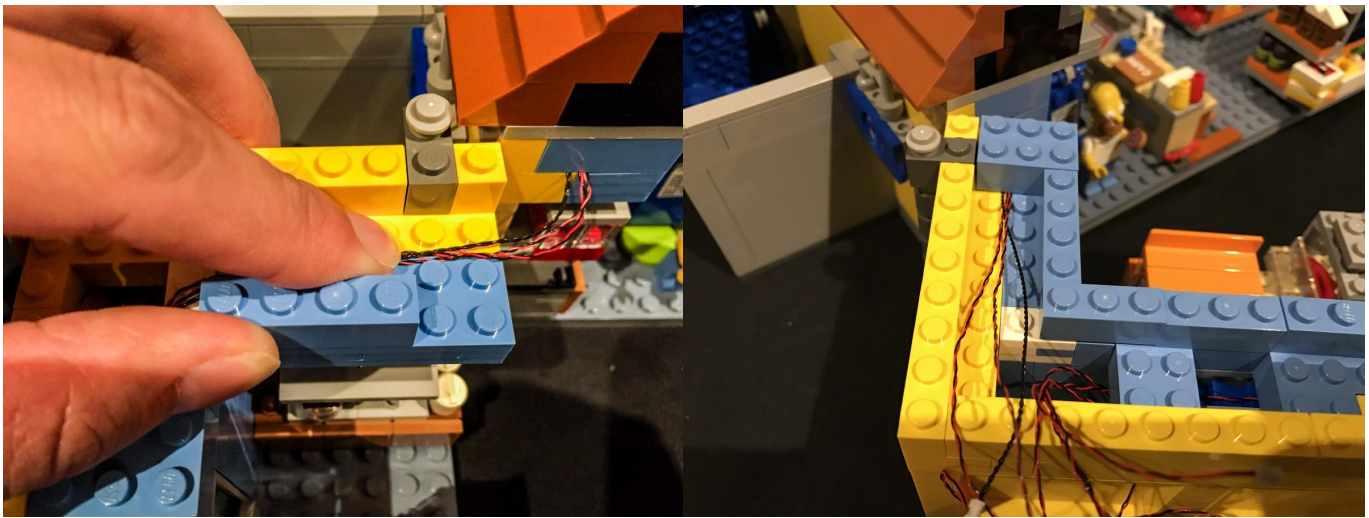
134.Reconnect another blue brick ensuring the cables are laid underneath.



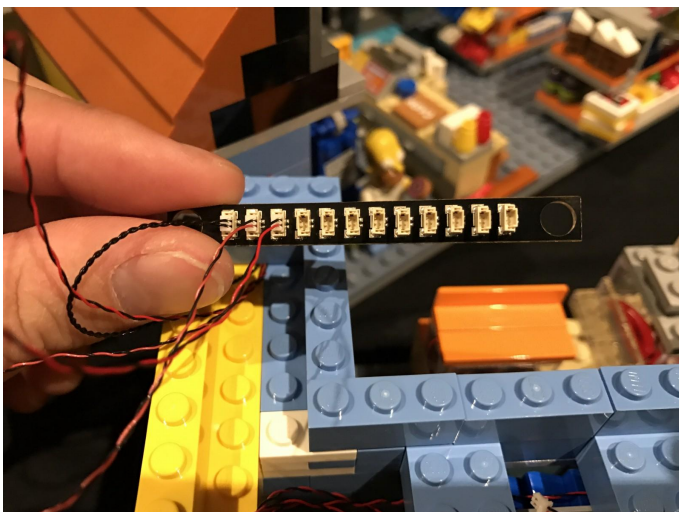
135.Install another White 30cm Dot Light to the bottom the last blue 2 x 6 brick in the following position before reconnecting the piece back.



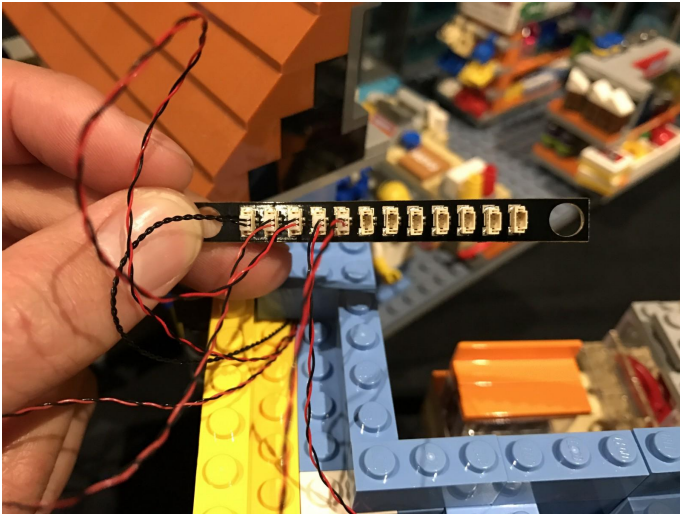
136. Take the cables from flashgame#1 and 2 as well as the 30cm cable and then pull them across to the other side. Lay them in between studs and then secure them down by reconnecting the blue 2x3 brick over the top. Ensure that you pull this section all the way out so that you have enough cables when you open and close the section.



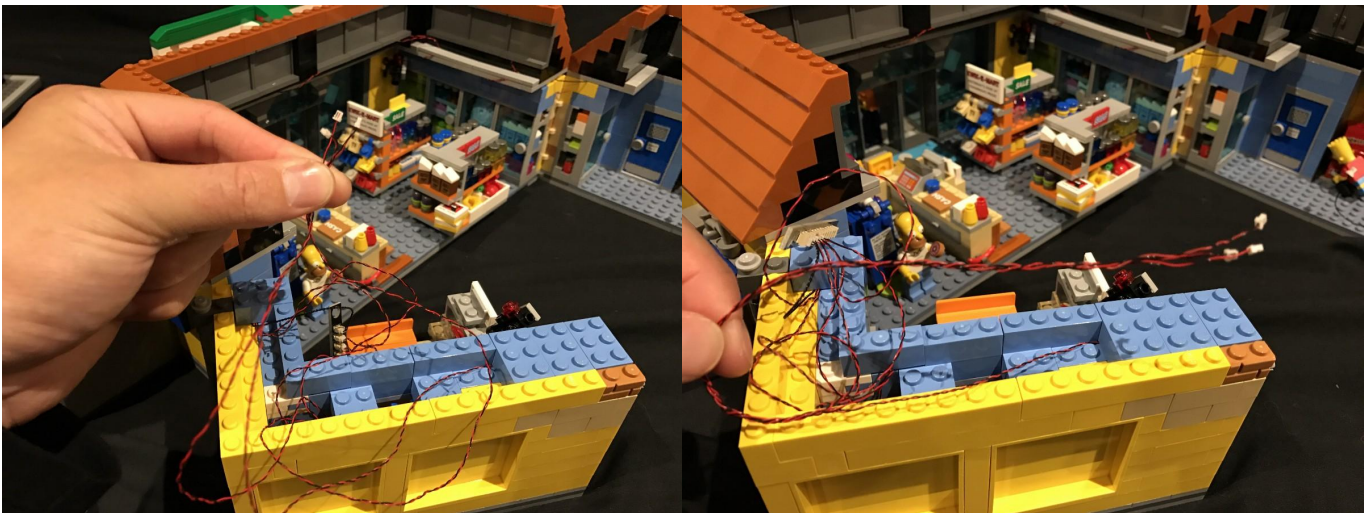
137. Connect the 3 cables we just pulled over into another 12-port expansion board.



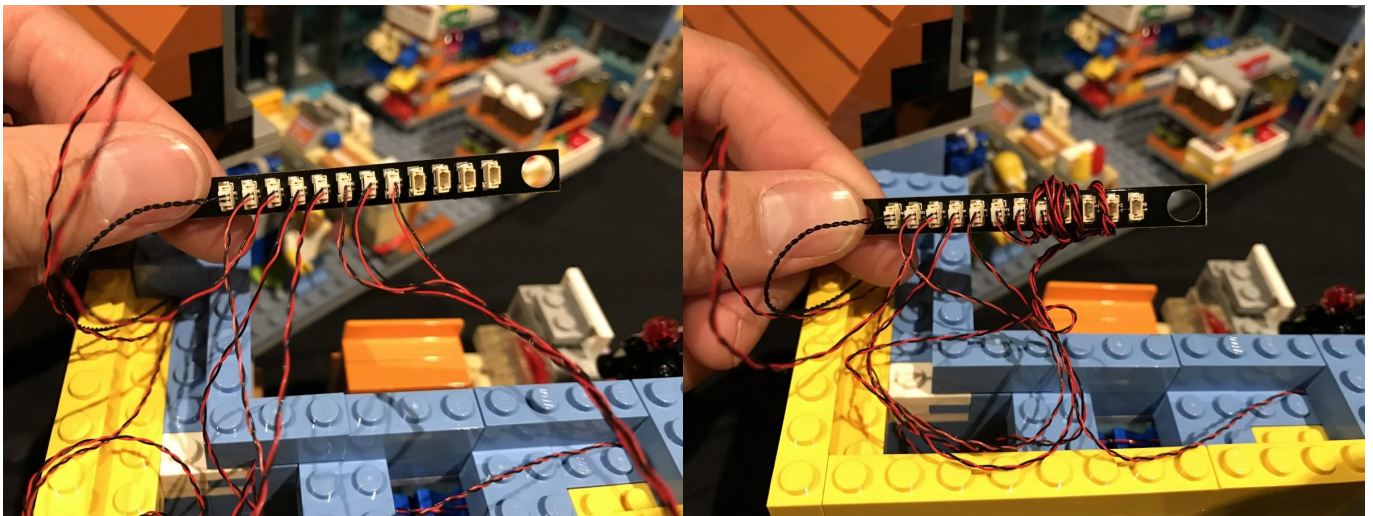
138. Take the cables from the hotdog stand and donut light and then connect them into the next available ports.



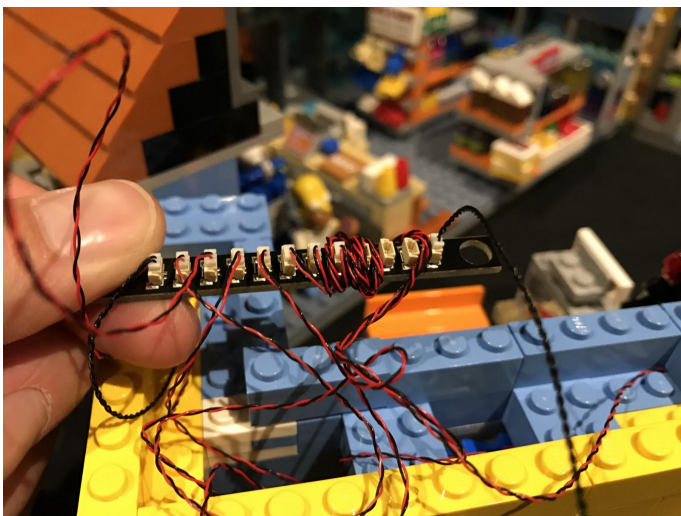
139. Take the cables from video#2 and fridge#5 and 6 and then twist them together so that they form one large cable.



140. Connect these 3 cables into the next available ports on the expansion board, then wind them around the expansion board to eliminate excess cable.



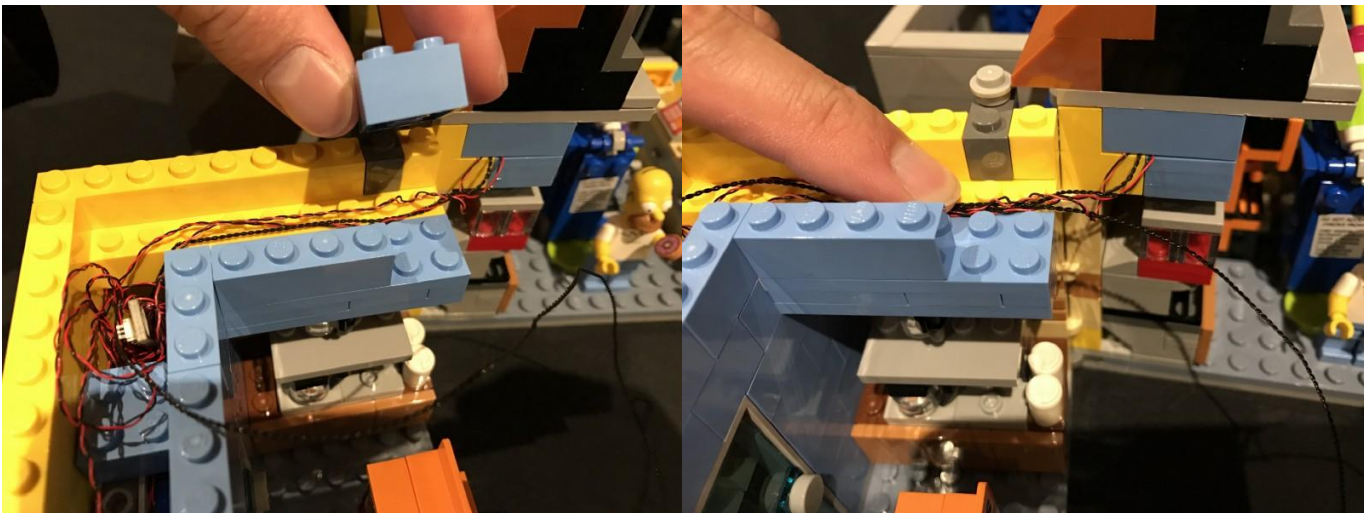
141. Take the final 30cm connecting cable and then connect this into a spare port on the expansion board.



142. Neatly place the expansion board and all cables into the corner space in between the fridges and wall ensure the 30cm cable is left out.



143. Pull the 30cm cable back up to the other side and then secure this down by disconnecting the blue 2x3 brick and then reconnecting it over the top of all 4 cables. Ensure they are all neatly laid in between studs.



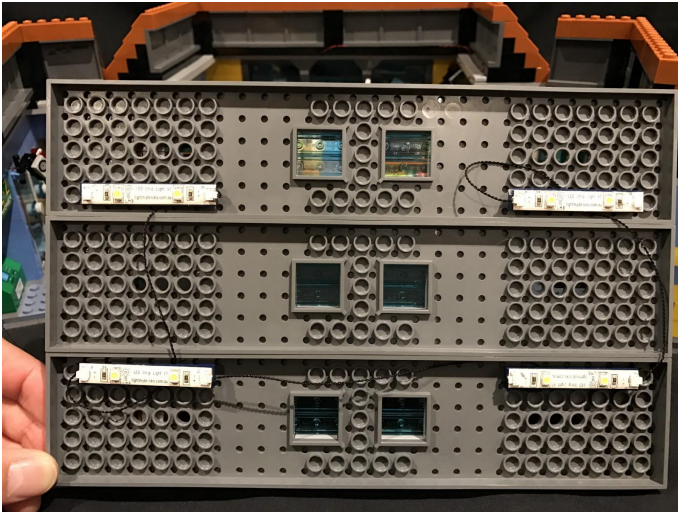
144



145. Ensure the rest of the cables are neatly tucked in between the walls before reconnecting back the roof section.



146. Take the centre roof piece and place it on its side so that we can access underneath of it. Take 4x Strip Lights and use the adhesive backing to stick them onto the provided 1x6 Plates. Install the 4 strip lights to the following positions and connect a 15cm cable between all of the strip lights (total of 3x 15cm cables required).



147. Finally, connect the centre roof section lights to the rest of the lighting circuit by taking the hanging 30cm cable and connecting it to the left port of the striplight in the top corner. Place the centre piece back to the top of the roof in its original position.



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

