

Downtown_Diner_10260 Fantasy Version LED Lighting Kit

Package contents:

- LED class
- 1x LEGO Lamp Post with dot Light installed
- 3x Flashing Warm White 30cm dot Lights
- 1x Warm White 30cm dot Light
- 2x Warm White 15cm dot Lights
- 1x Warm White 15cm Big Lights
- 4x White 15cm dot Lights
- 8x Warm White Strip Lights
- 1x 8-Port Expansion Boards
- 1x 6-Port Expansion Board
- 3x 5cm Connecting Cables
- 5x 15cm Connecting Cables
- 2x 30cm Connecting Cables
- 15x Adhesive Squares
- 1x USB power cord
- 1x Button power supply

RGB class

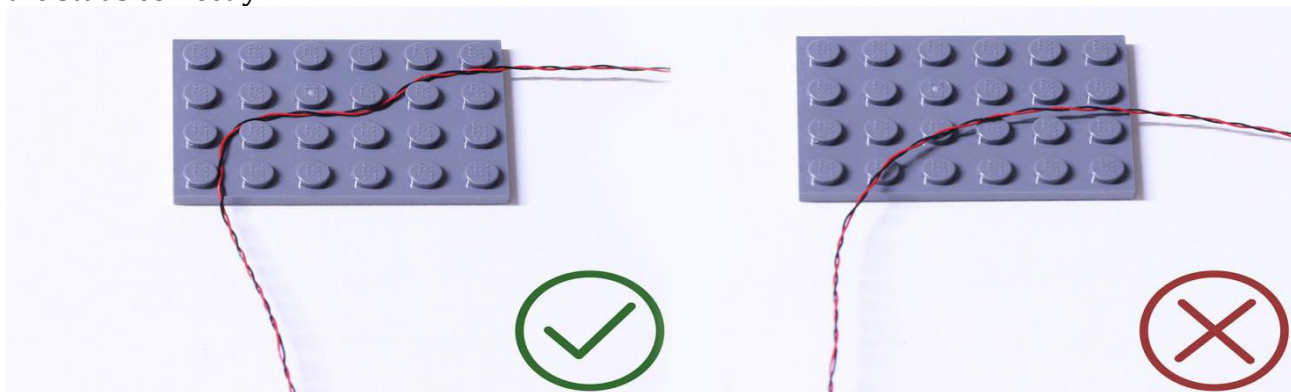
- 2x RGB dot Lights
- 2x RGB Strip Lights
- 1x 15cm Connecting Cables
- 1x 30cm Connecting Cables
- 1x remote control module

LEGO Pieces

Note:

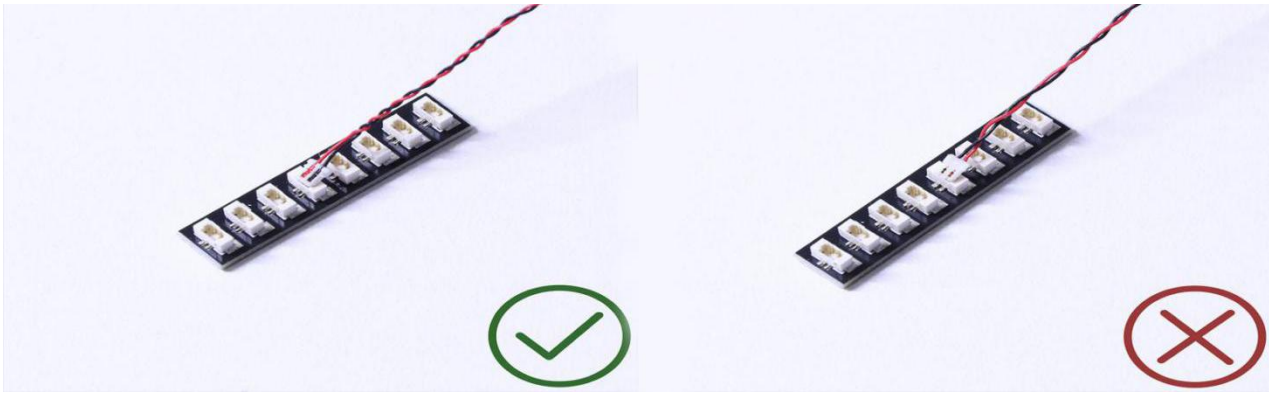
Place wires on the surface or under the LEGO building blocks.

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

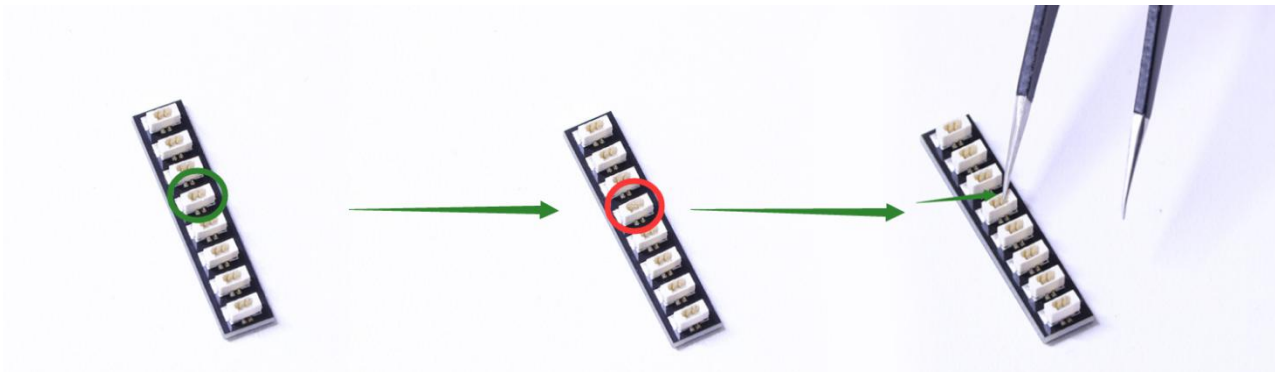


Insert the connectors to the ports.

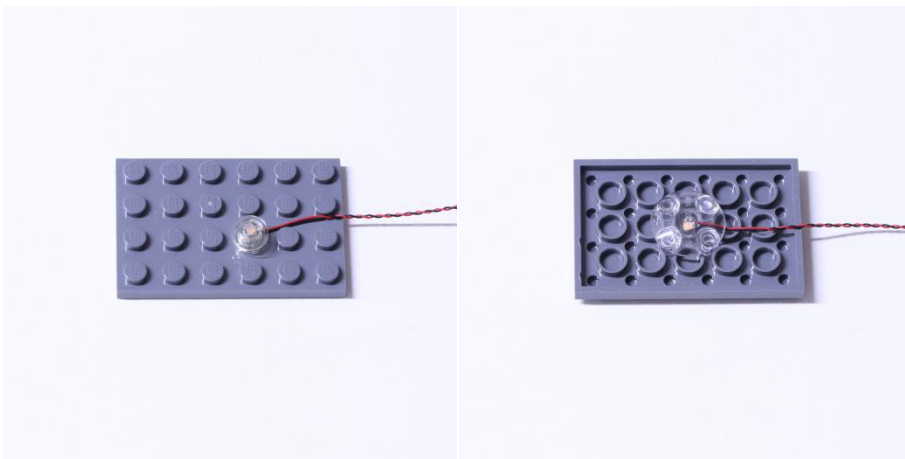
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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



At this point, use the tweezers to straighten the bent pins.

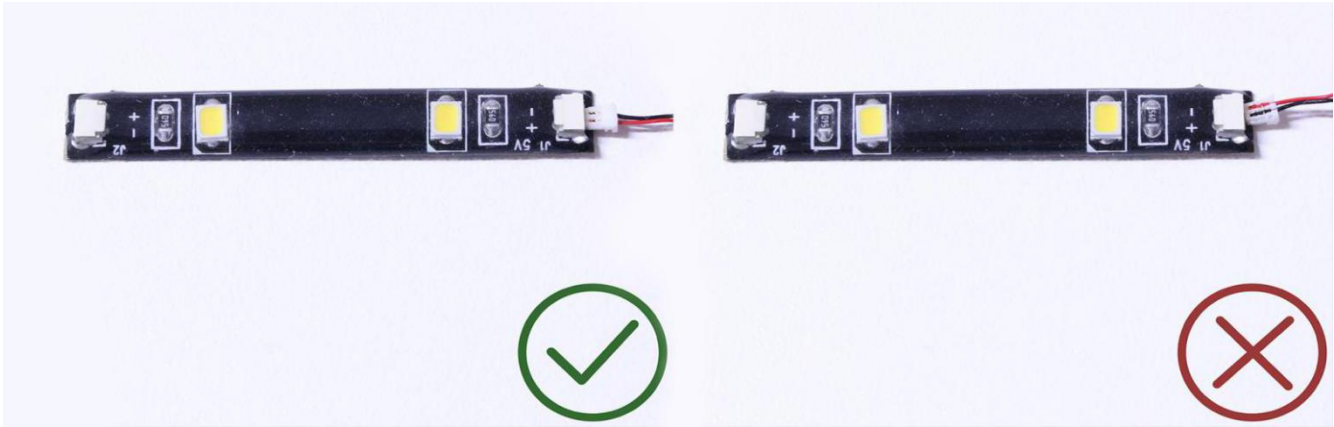


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

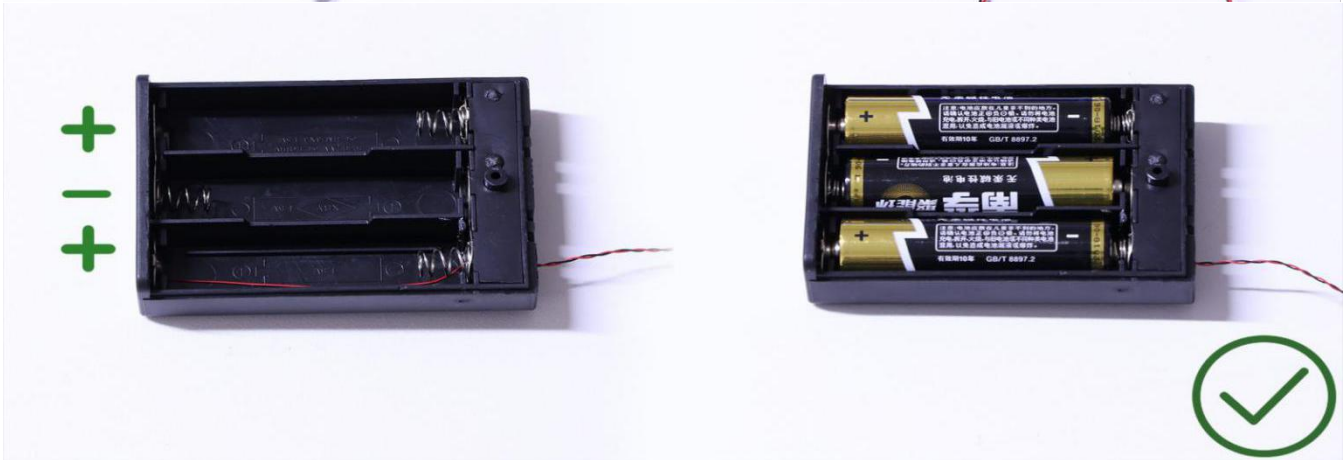


Connecting cable connectors to Strip Lights

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



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

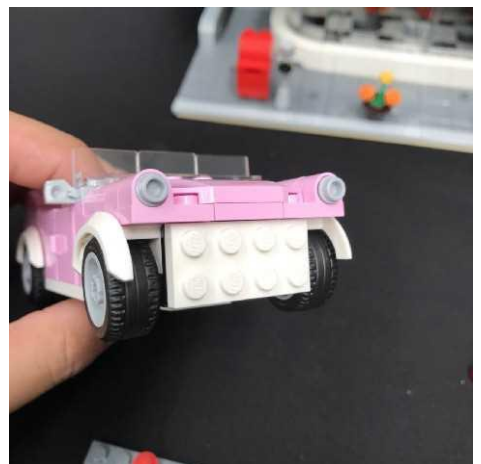
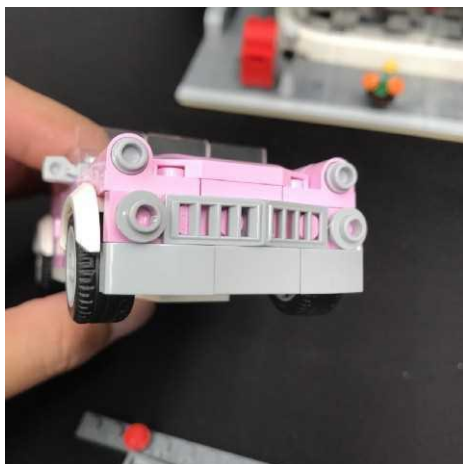
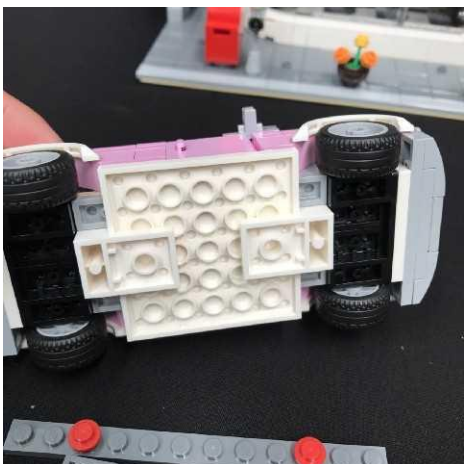
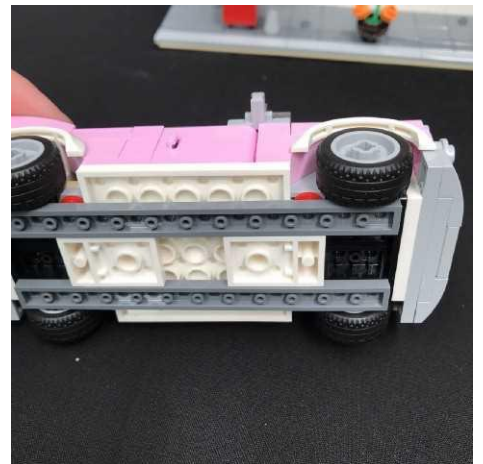


OK, Let's Begin!

Lighting the Car

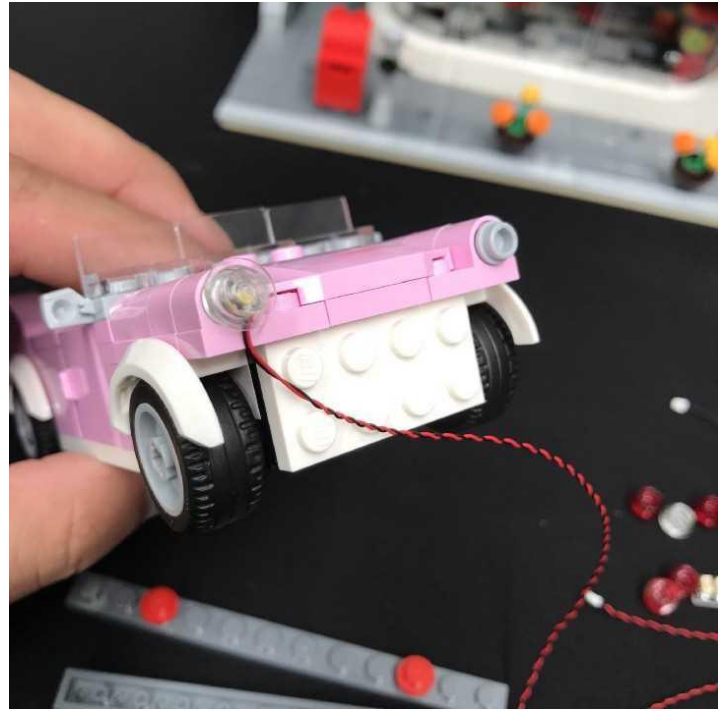
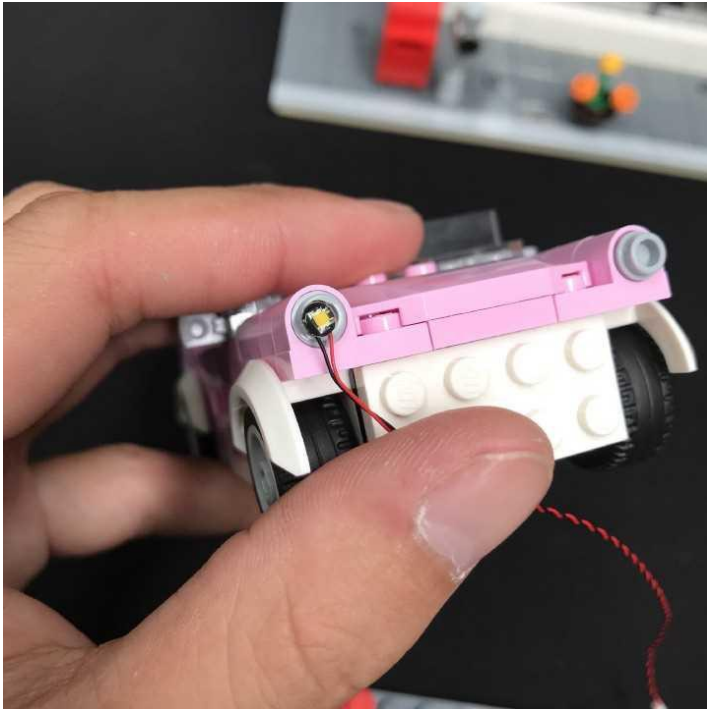


Start by disconnecting the following sections of the front and bottom of the car (trans clear tiles, 1x12 plates, and front bumper section).

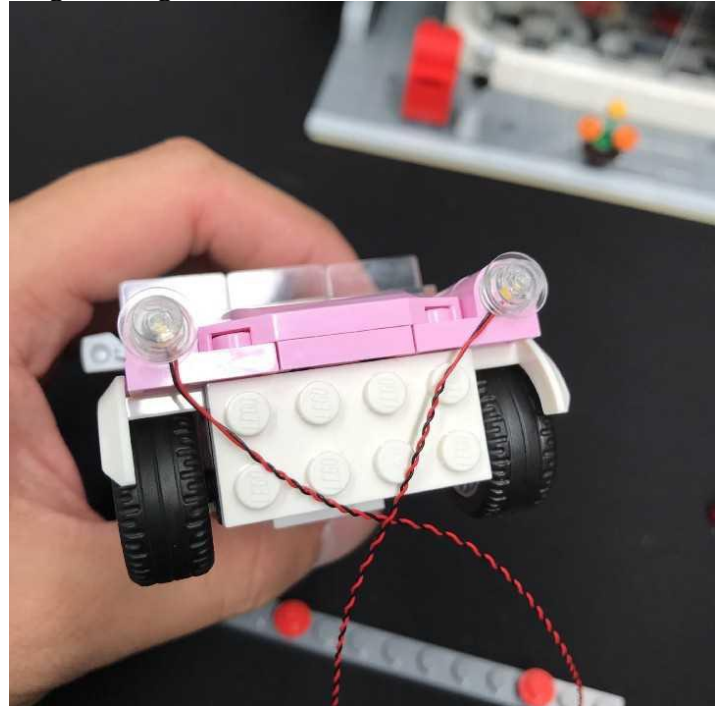
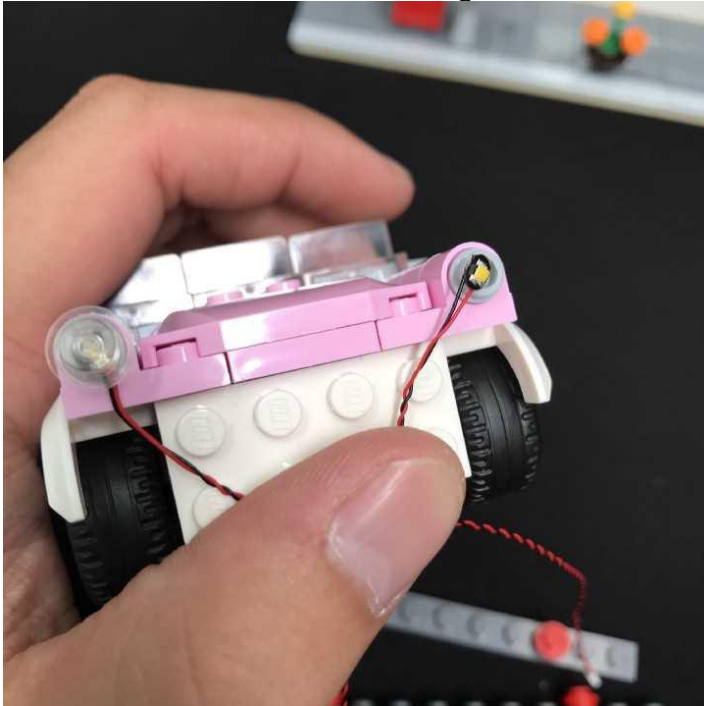


Take a White 15cm dot Light and with the cable facing down, place it directly over one of the front grey

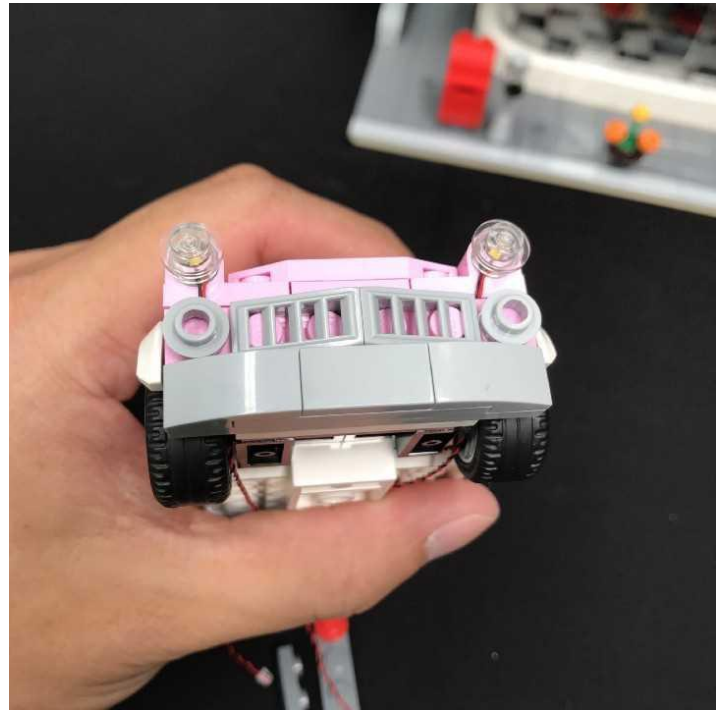
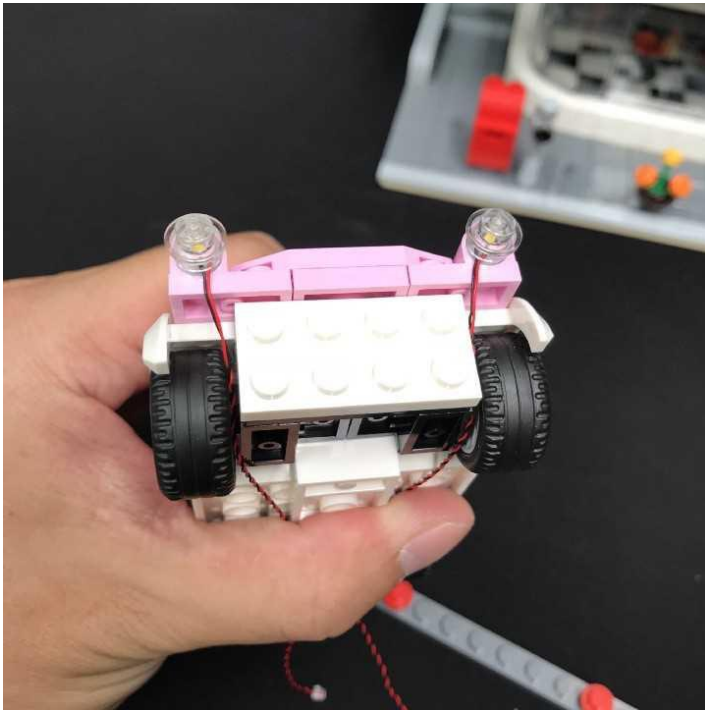
studs. Take a provided Trans Clear Round Plate 1x1 and connect it over the top to secure the dot Light in place.



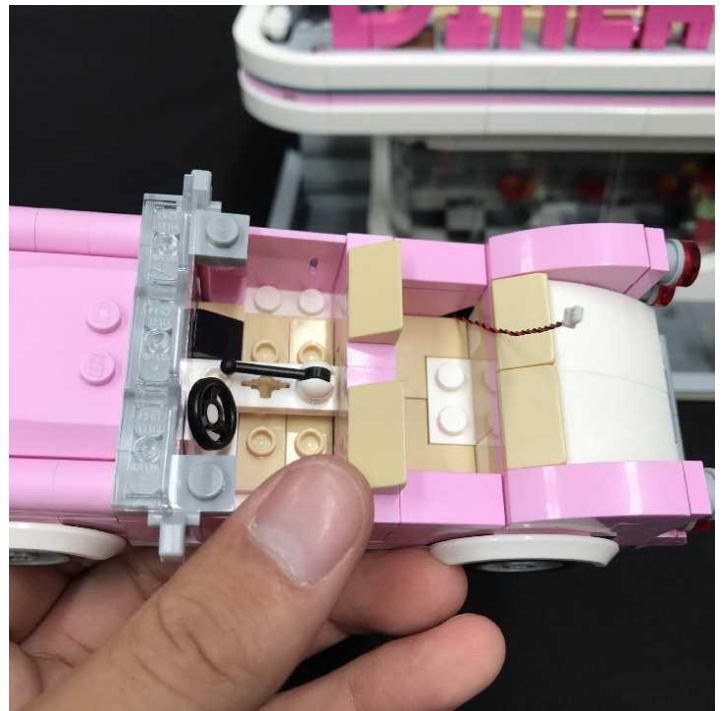
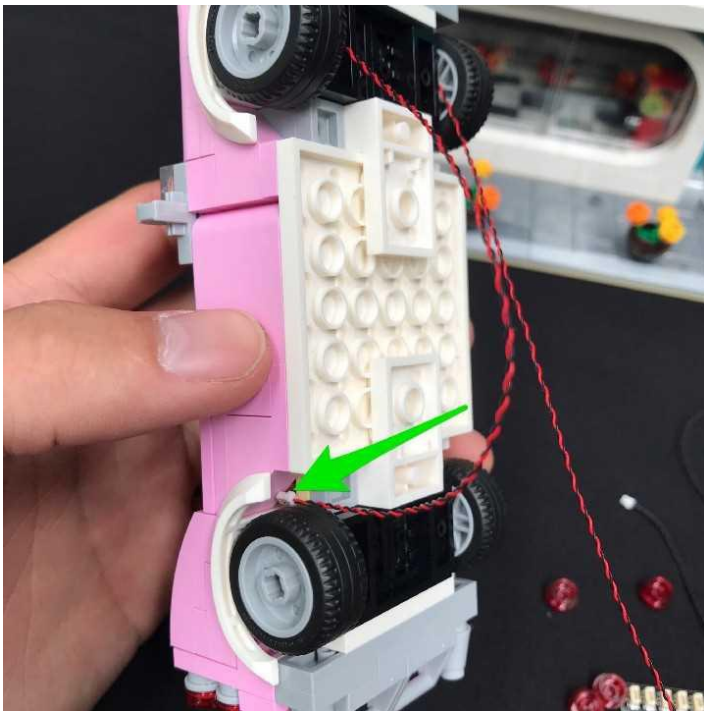
Install another White 15cm dot Light to the other headlight using the same method as above.



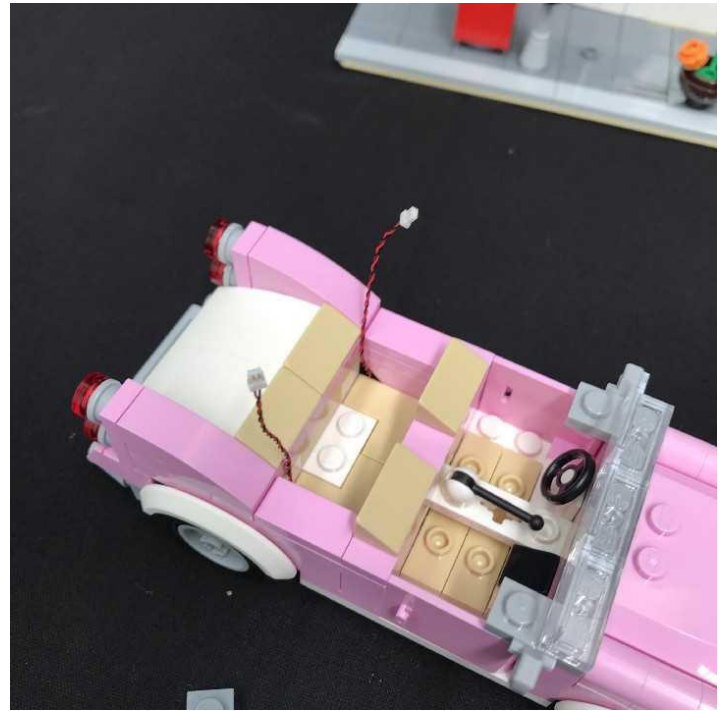
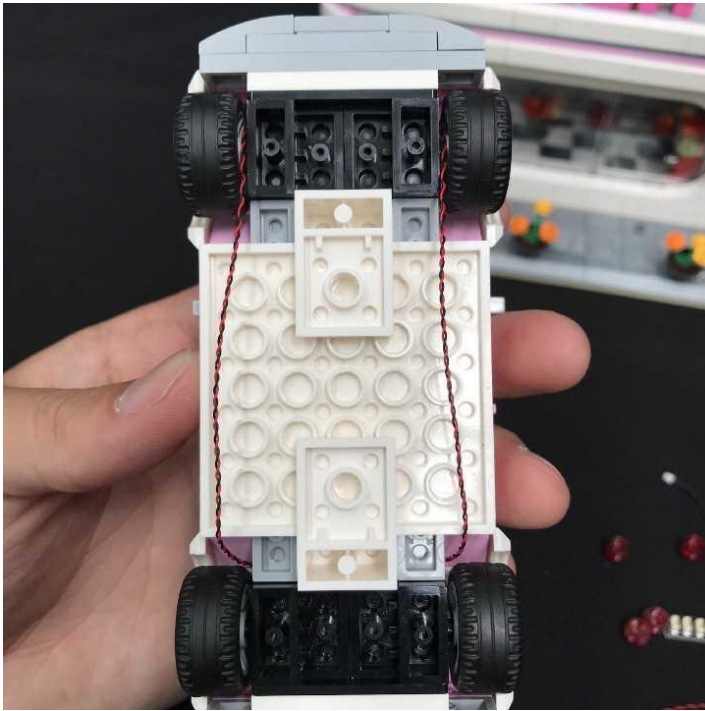
Lay both dot Light cables down the side of the White 2x4 plate and then reconnect the front bumper section over the top.



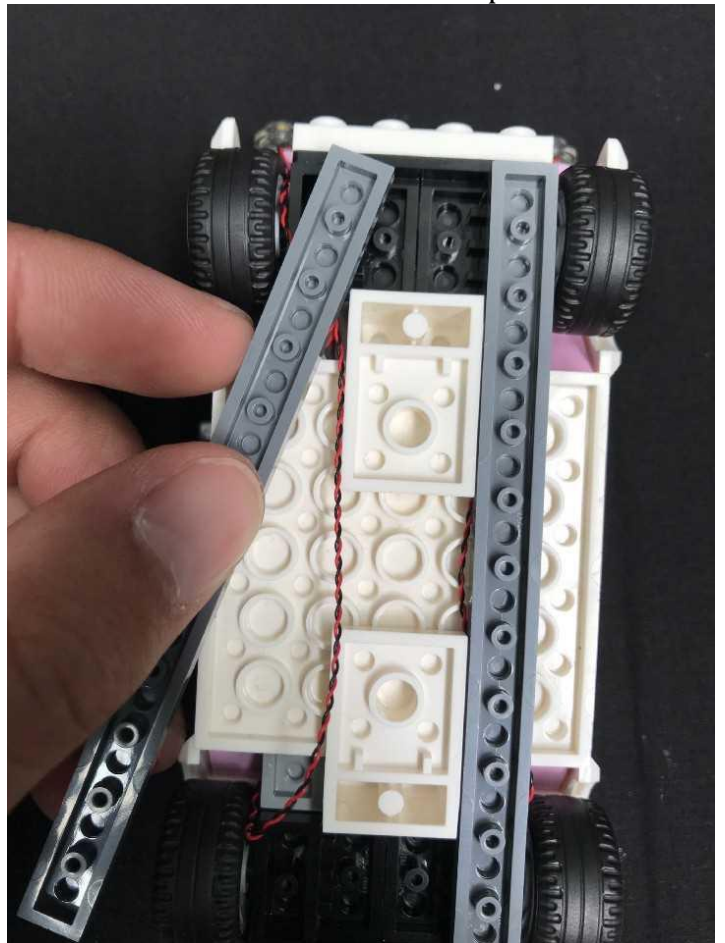
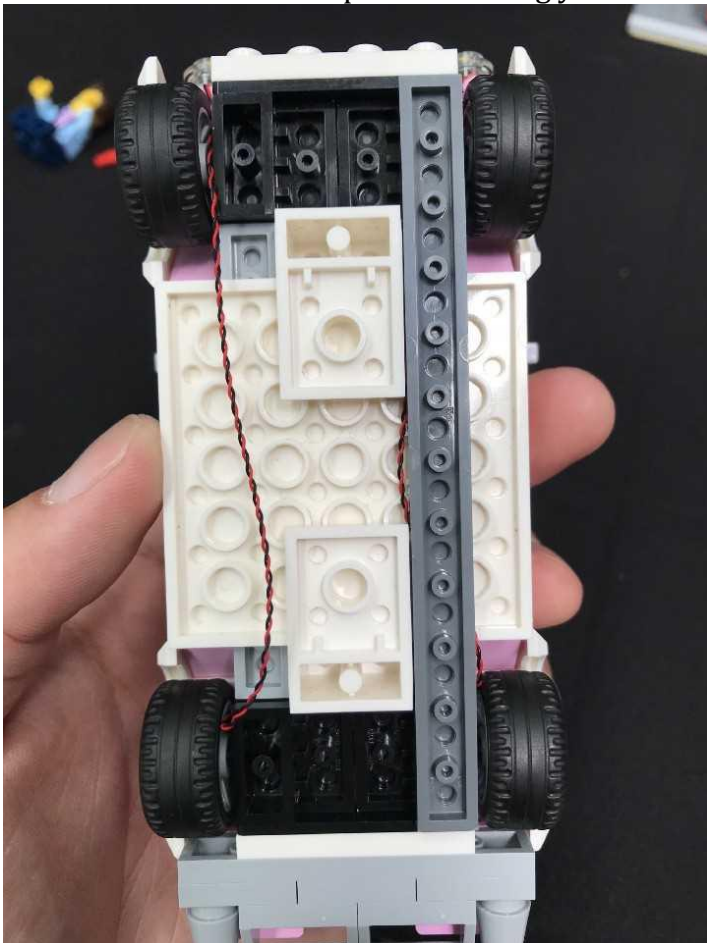
Bring both cables down the base of the car and then thread each cable through the spacing in between the back wheel and side of car.

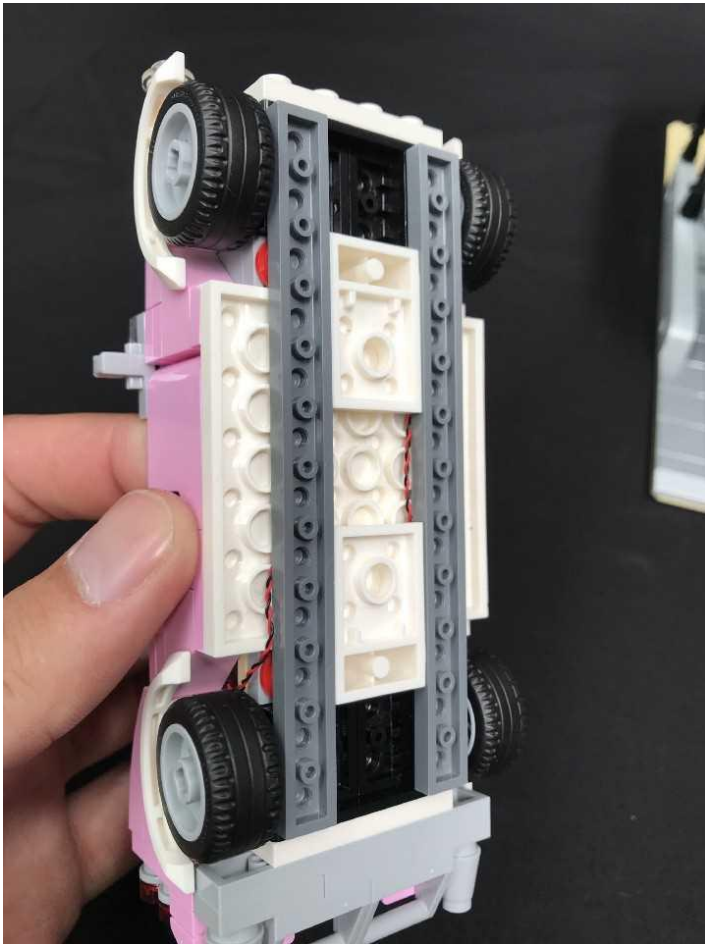


Pull each cable up from the inside of the car.

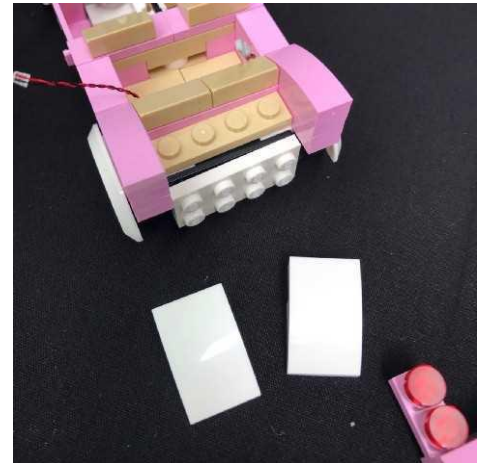
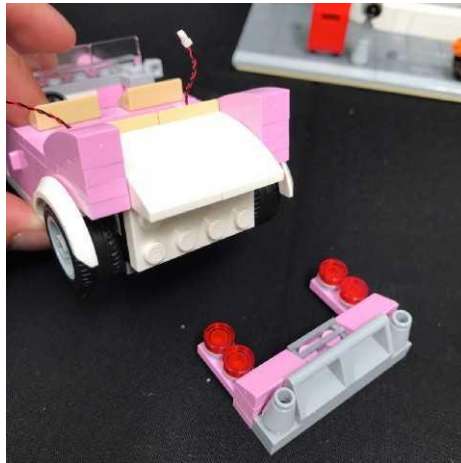


Reconnect the two 1x12 plates ensuring you secure each cable in between studs of each plate.





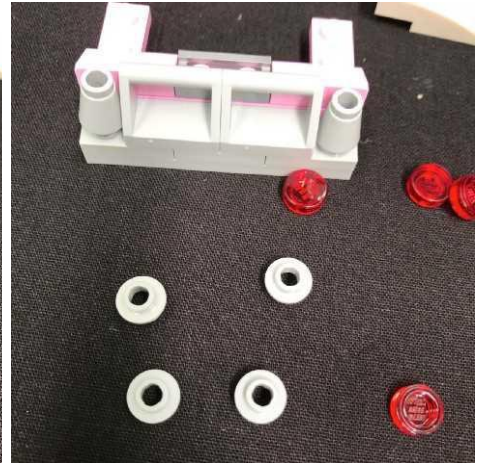
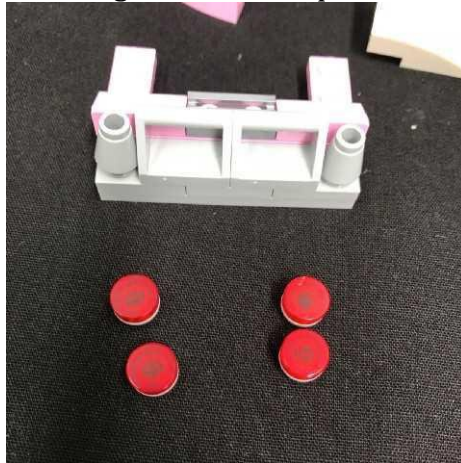
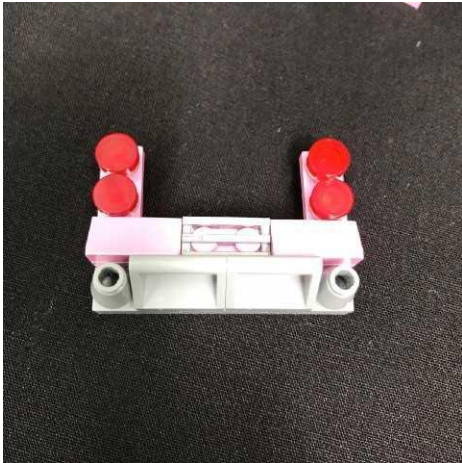
We will now install the tail lights. First disconnect the whole section as well as the 2 curved pieces as per below:



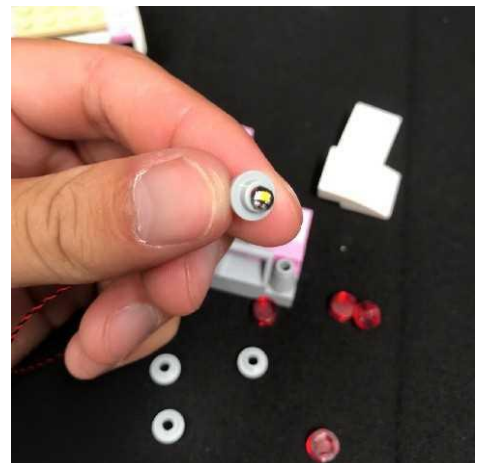
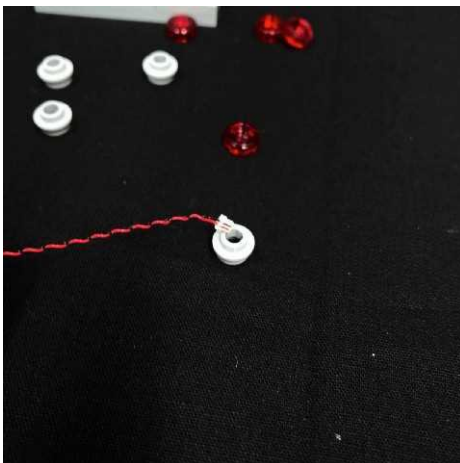
Continue to disconnect pieces from the back of the car.



Disconnect and disassemble the four tail light sections as per below:

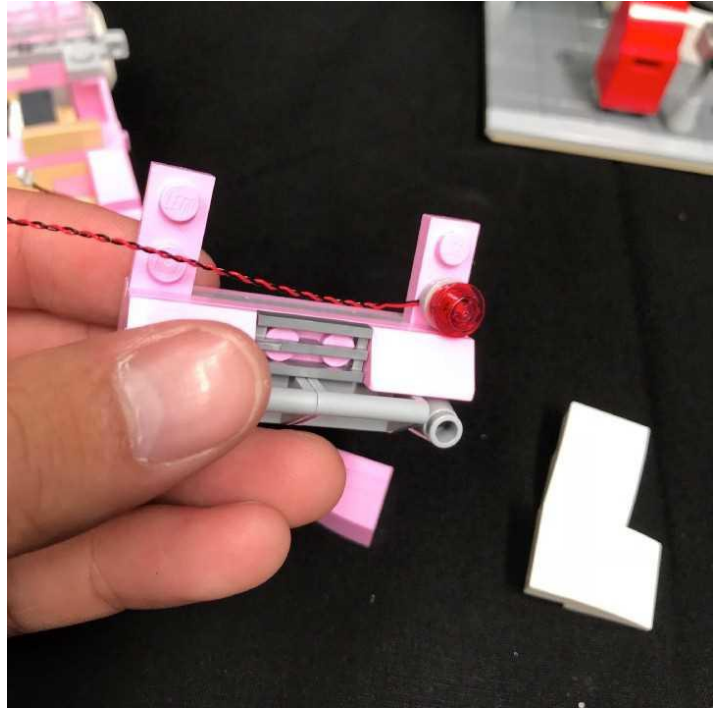


Take another White 15cm dot Light and then thread the connector side through the top of one of the Light Grey Round Plates. Thread it all the way through and then slightly bend the dot Light so that it sits kat against the top of the plate.



Take one of the provided Trans Red Round Plates 1x1 and then connect it over the top to secure the dot

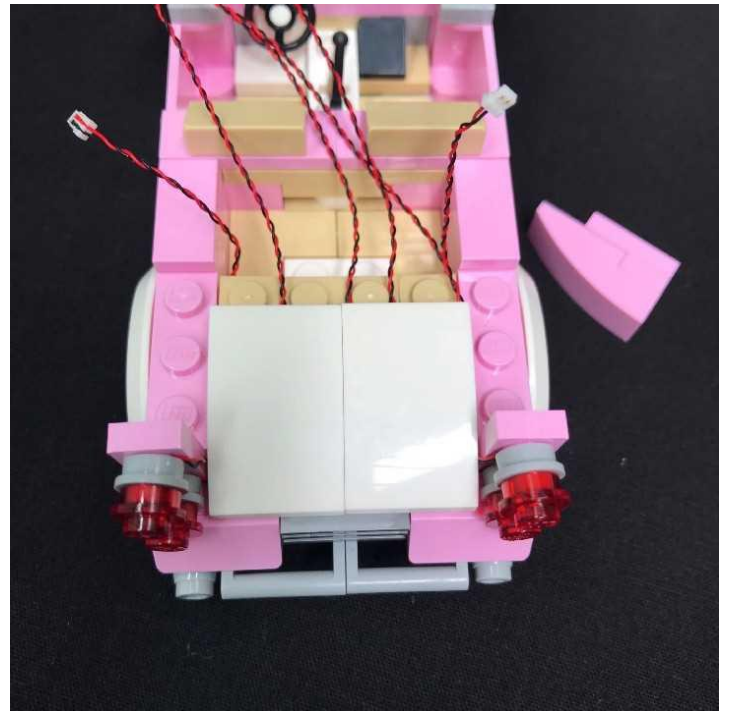
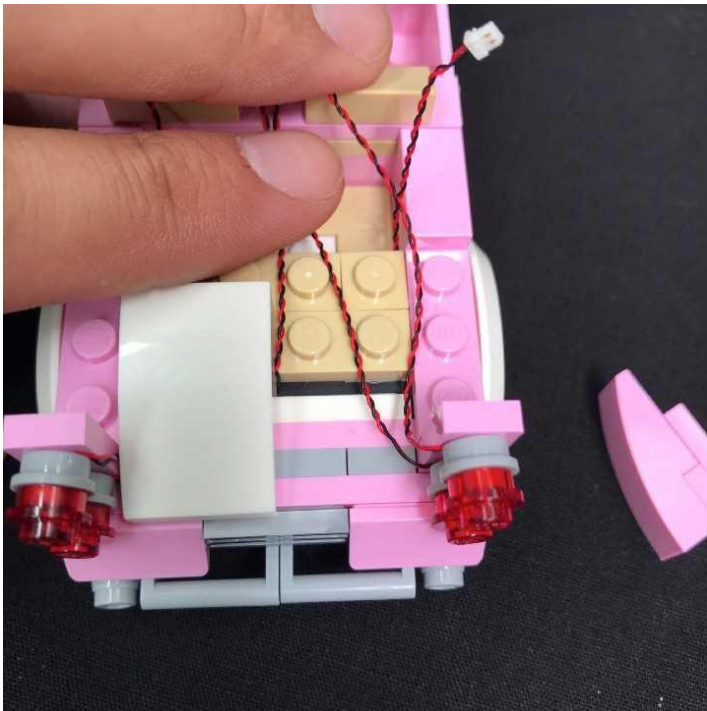
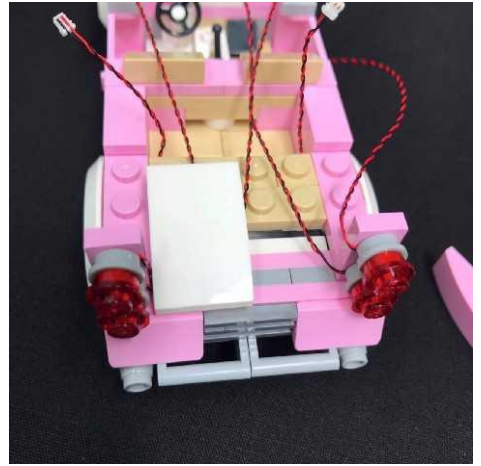
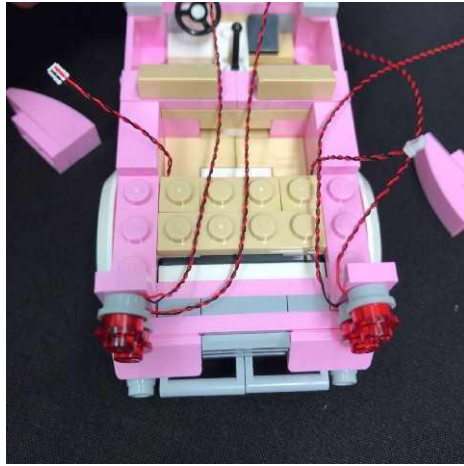
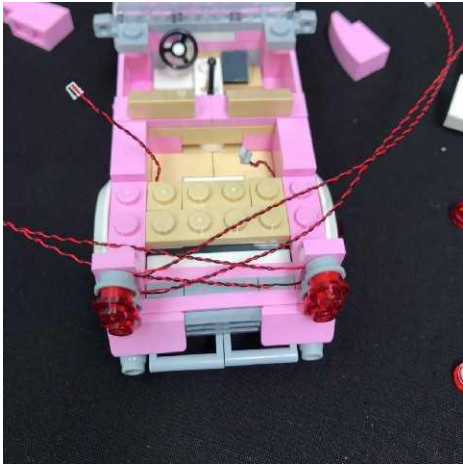
Light in place. Reconnect this plate to the back section ensuring the cable is facing toward the middle of the car.



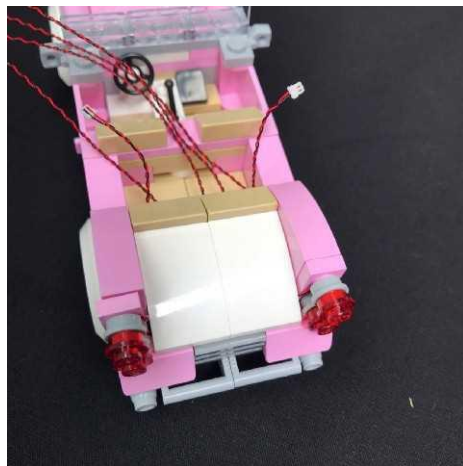
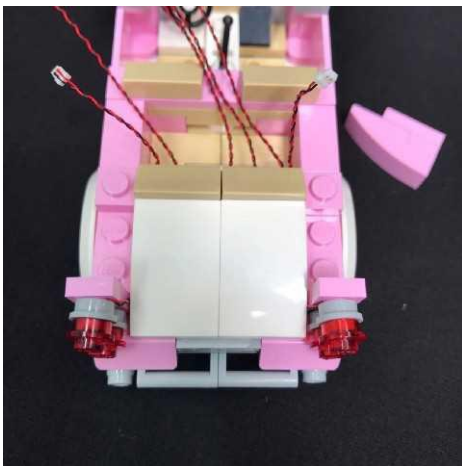
Repeat previous step to install another 3x White 15cm dot Lights to the back of the car.



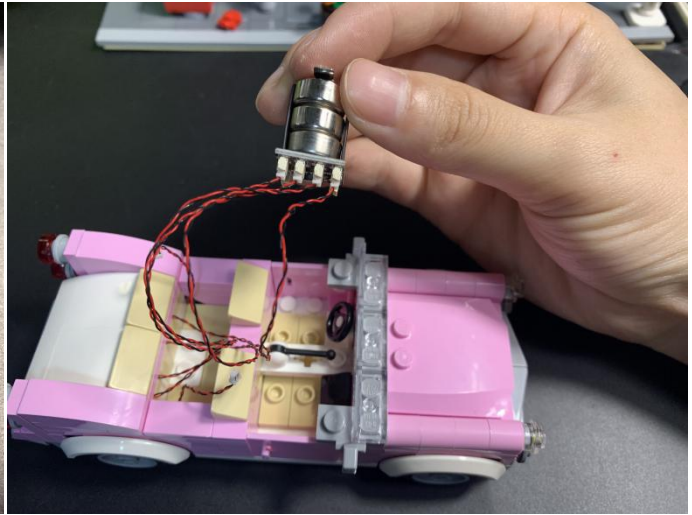
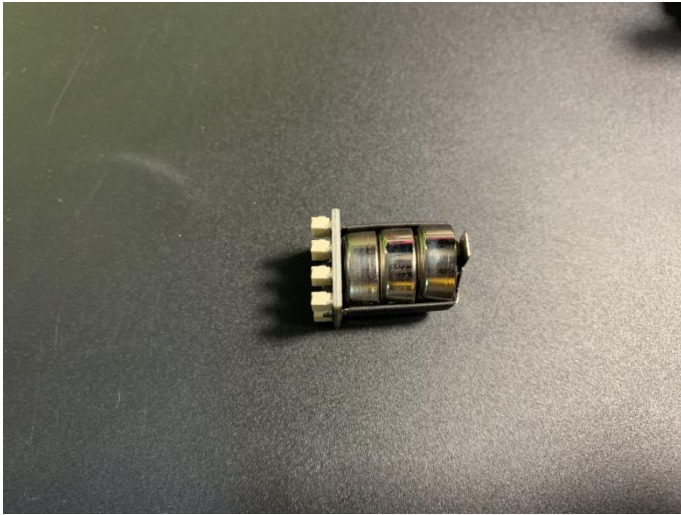
Reconnect the back section to the car and then take the two dot Light cables from each side and lay them in between studs before reconnecting each curved white piece on top.



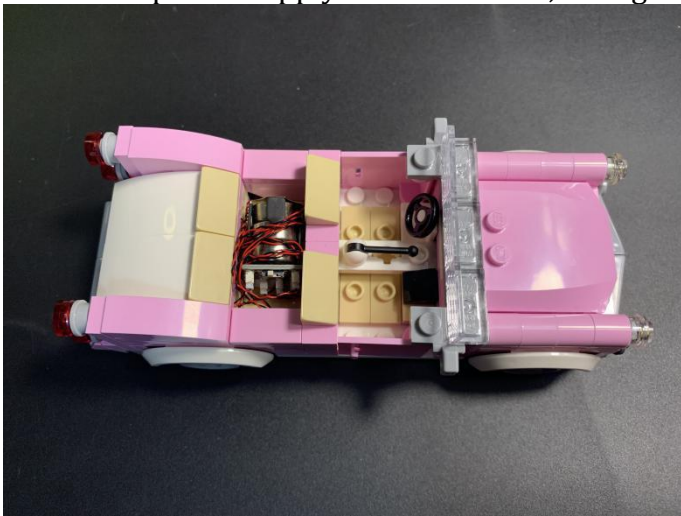
Continue to reconnect surrounding pieces to the back of the car.



Take the small button power supply, connect the lamp grain line to the socket, and wrap it around the power supply according to the slack of the line.



Secure the power supply to the rear seat, taking care that the power switch is facing up



Turn on the switch and test it!



This completes the installation of lights for the car and we are now ready to move on to lighting the Downtown Diner.

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Lighting the Downtown Diner

First remove the top two levels of the Downtown Diner then disconnect the lamp post and 2x4 plate underneath.

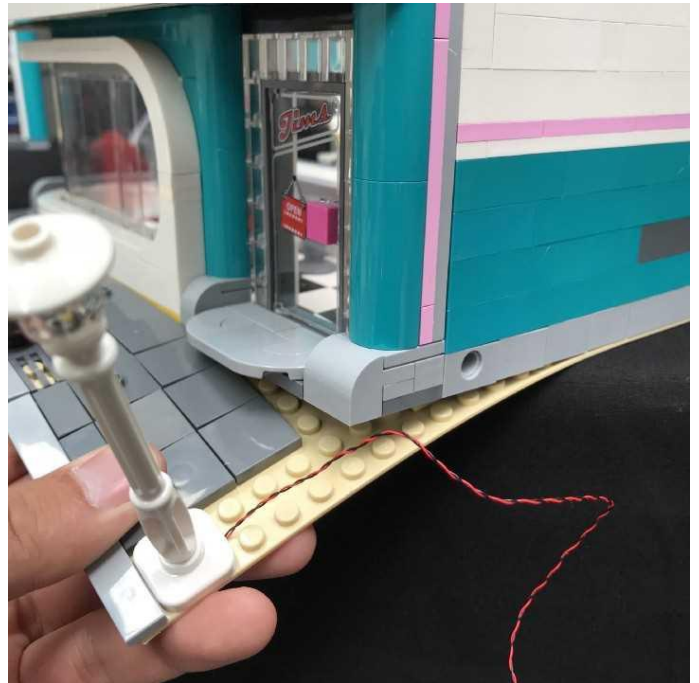
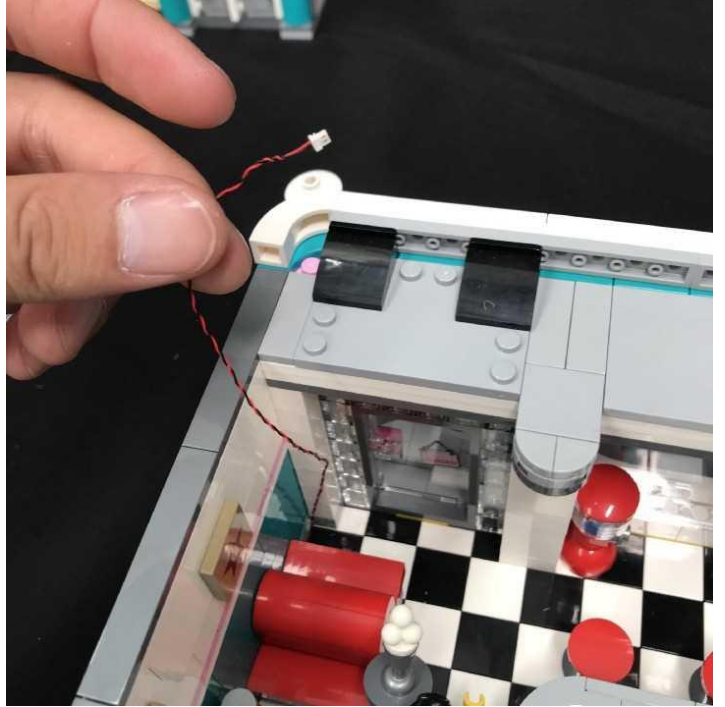




Disconnect the following two grey tiles above where the lamp post was connected to.



Take the LEGO Lamp Post with dot Light installed and then connect it to the base plate ensuring the cable is facing toward the building. Gently bend the corner of the base plate down so that the bottom right corner of building disconnects and provides a gap underneath. Thread the lamp post cable in between this spacing and then pull the cable up from the inside.



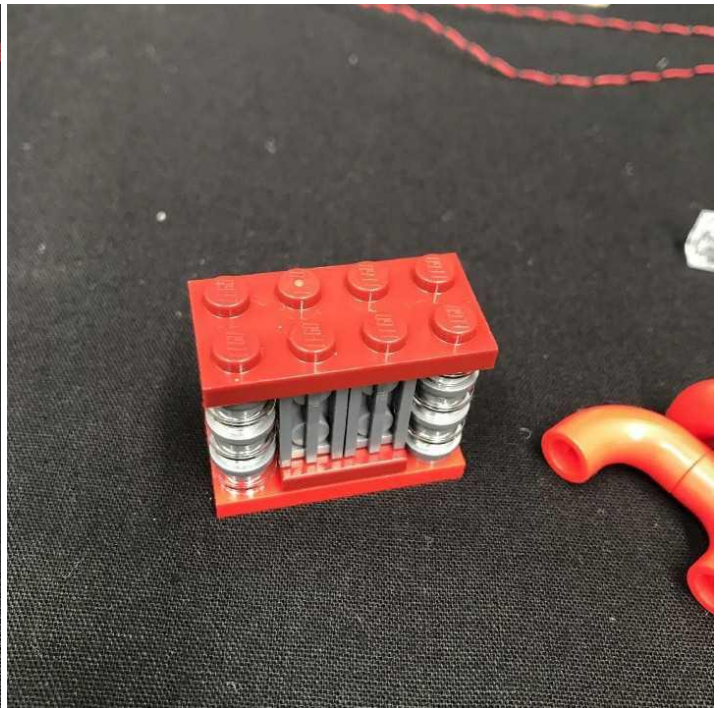
Pull the cable all the way up eliminating excess cable between the lamp post and building and then



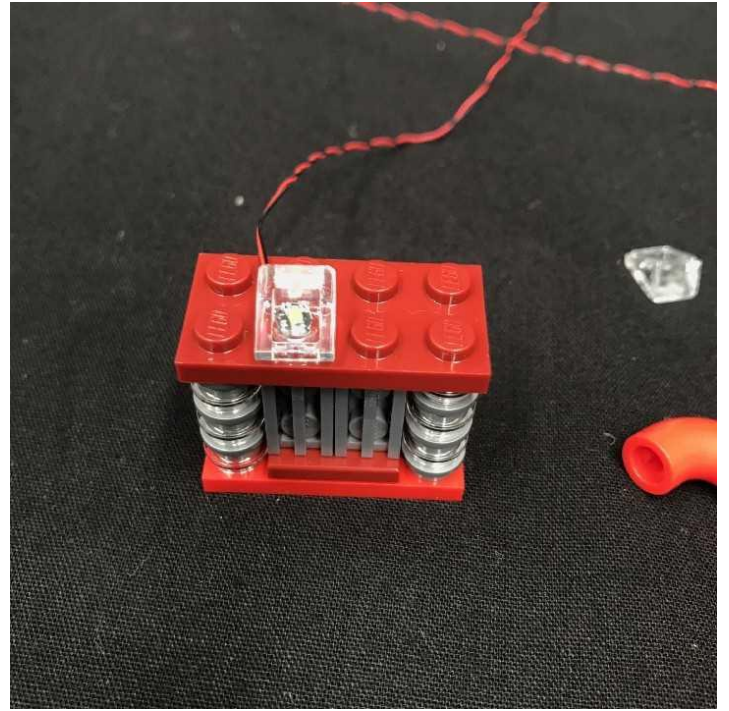
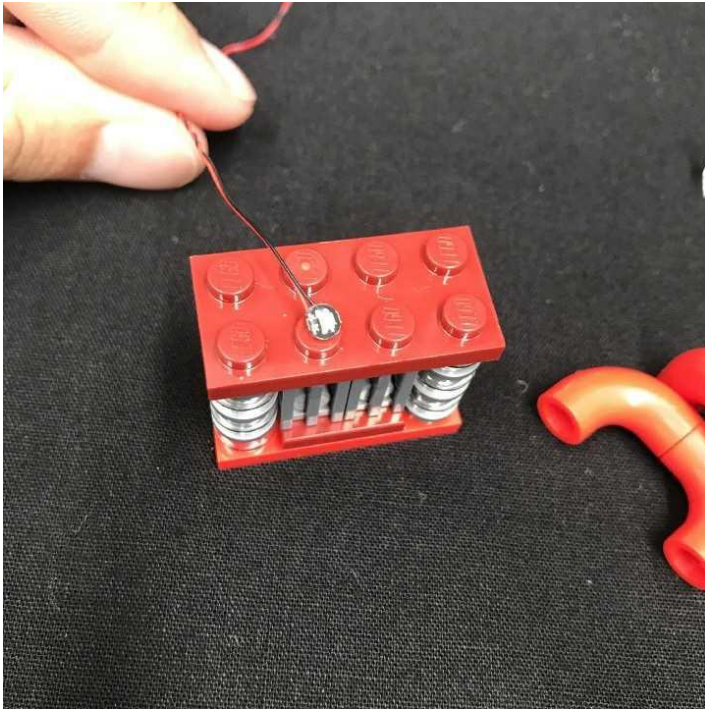
reconnect the bottom right corner of the building to the base plate. Ensuring the lamp post cable is laid in between studs, reconnect the tiles we removed earlier



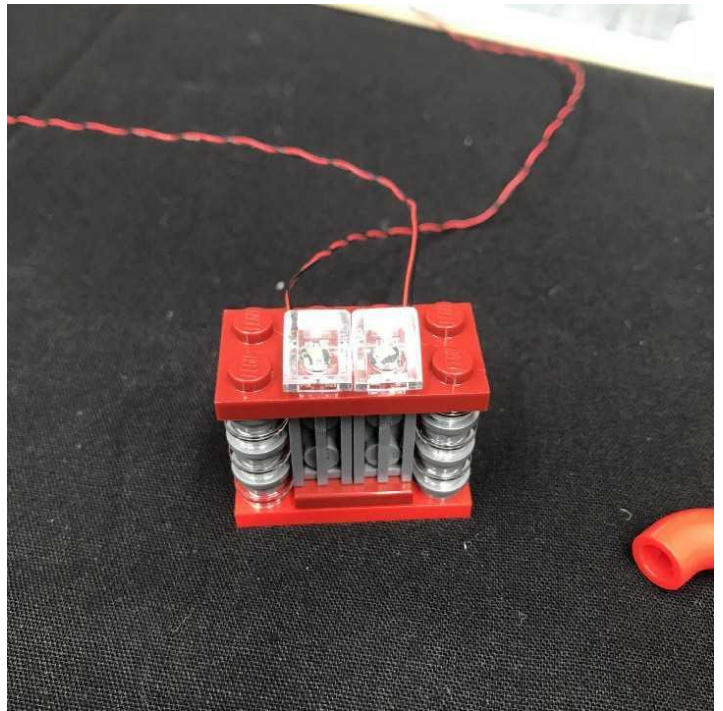
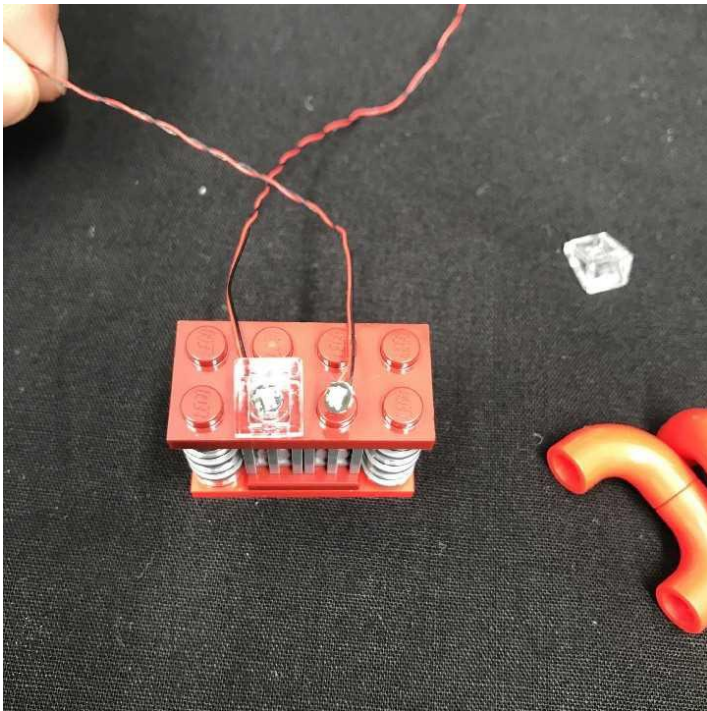
We will now install kashing lights to the jukebox. First disconnect the jukebox and then disassemble pieces as per below:



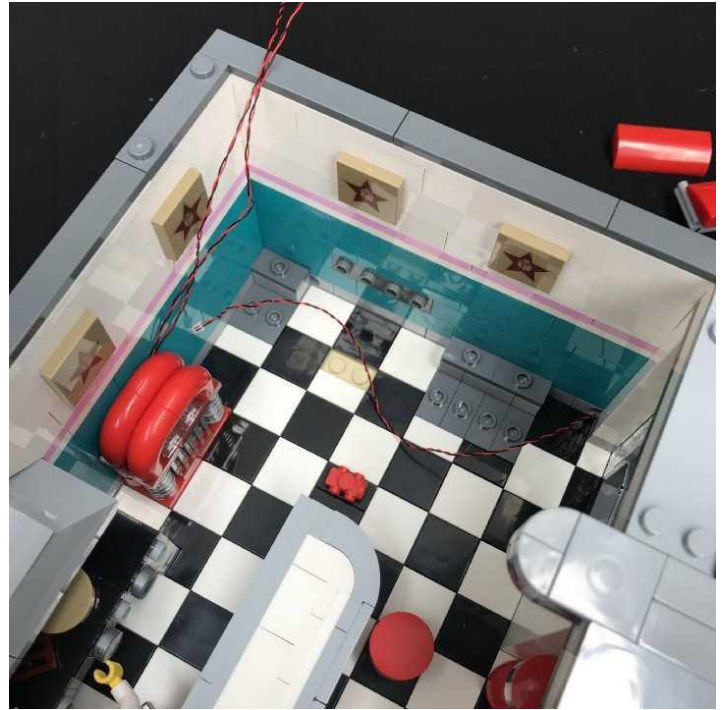
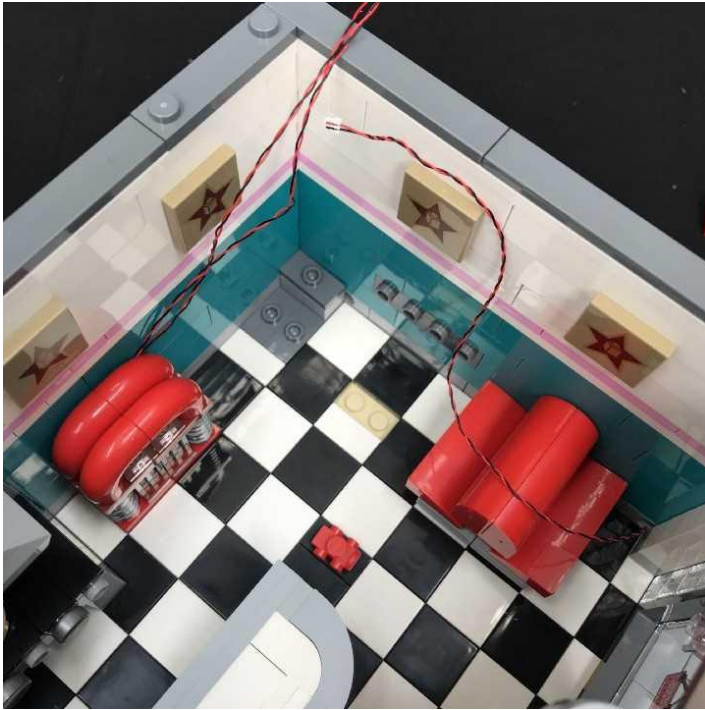
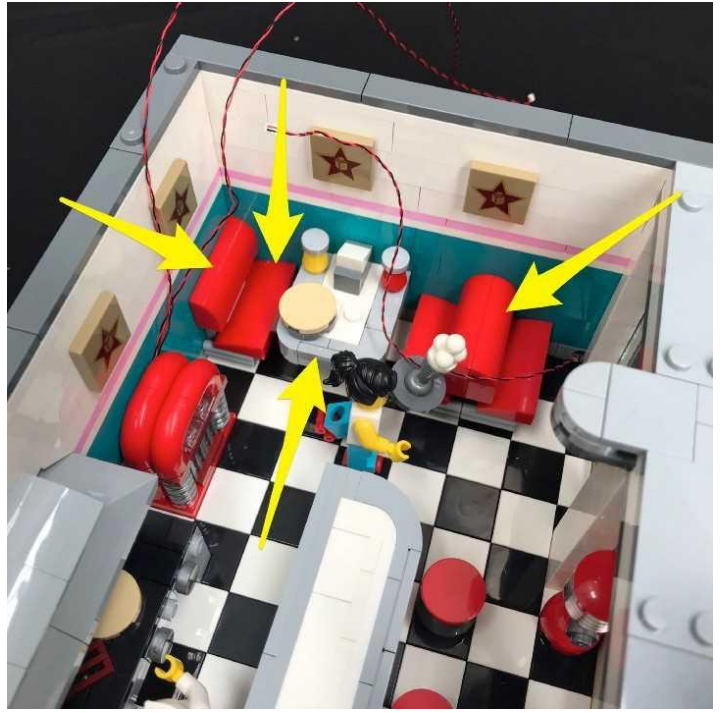
Take a Flashing White 30cm dot Light and then place it (with cable facing toward the back) directly over the top of the stud toward the front of the jukebox. Reconnect one the angled trans clear tiles over the top securing the dot Light in place.



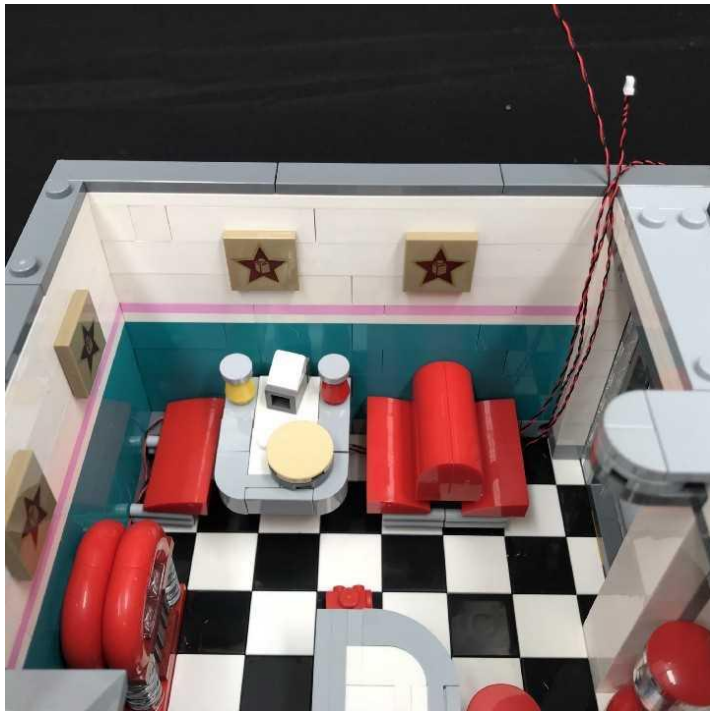
Repeat this step to install another Flashing White 30cm dot Light to the right side then reconnect surrounding pieces of the jukebox.



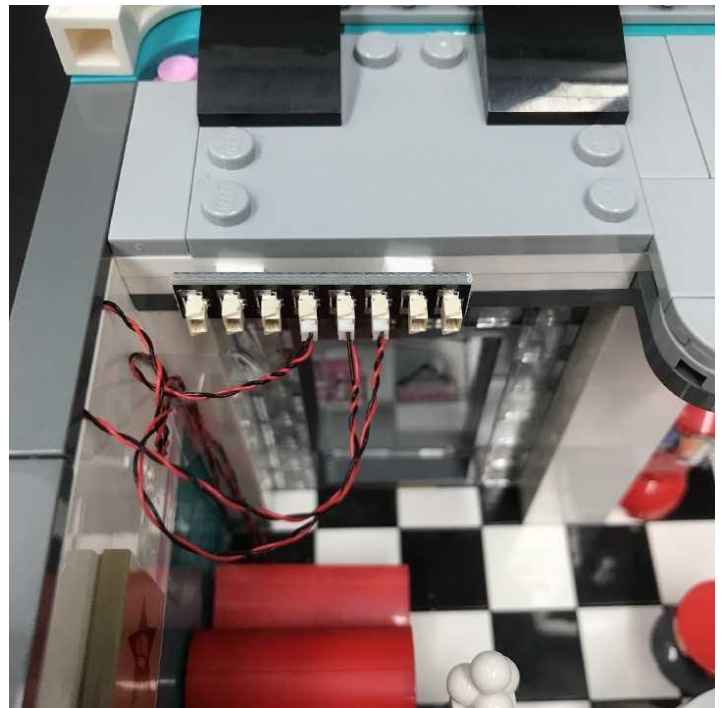
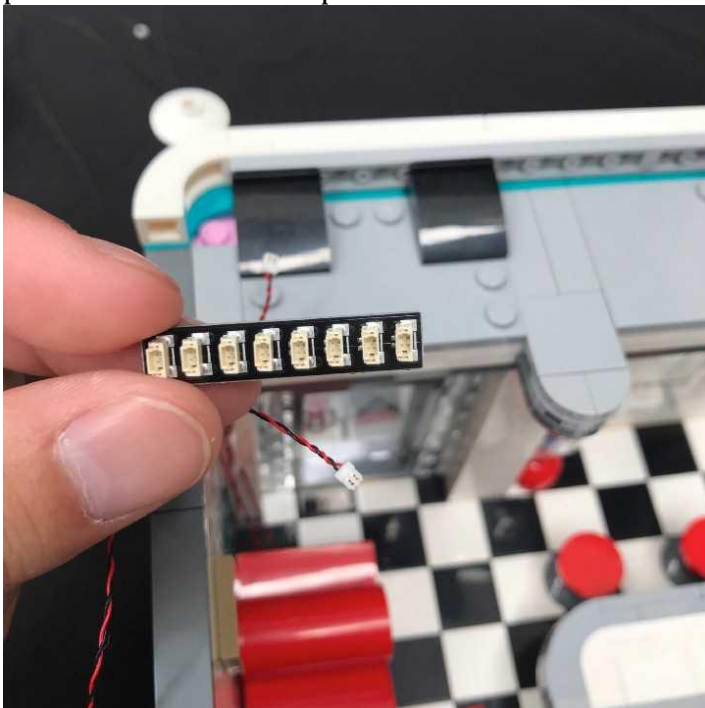
Reconnect the jukebox to the inside of the diner and then remove the following sections which make up the bench in the corner, side tables and extra seats.



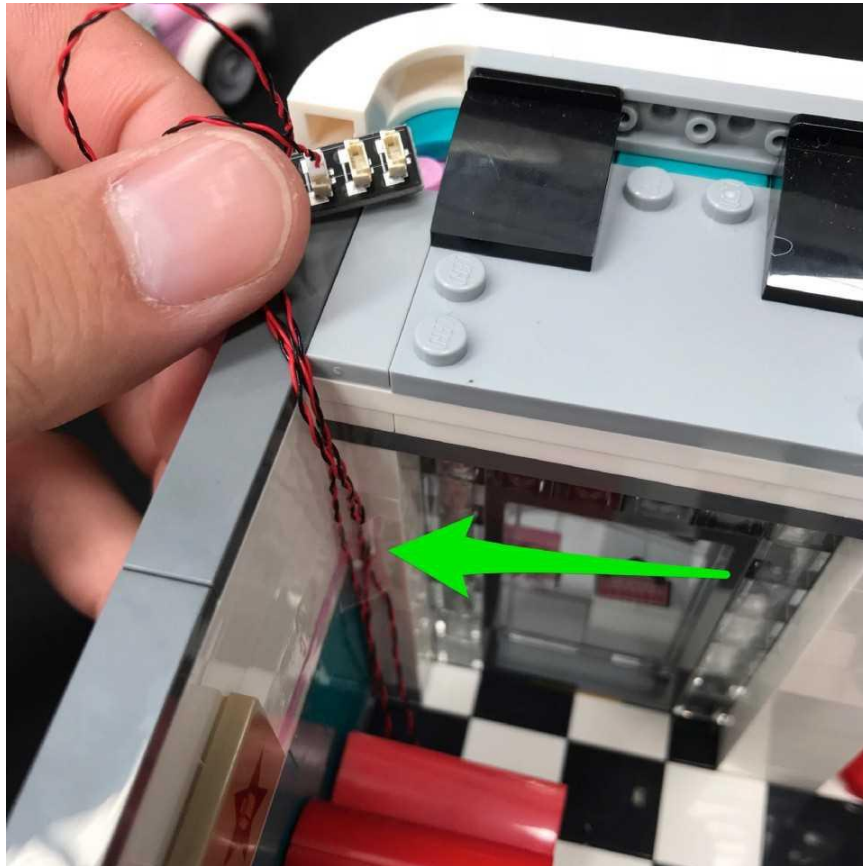
Lay the two cables from the jukebox down and around the bottom corners of the diner. Secure them in place by first reconnecting the bottom of the corner seat, followed by the table, then the remaining chairs.



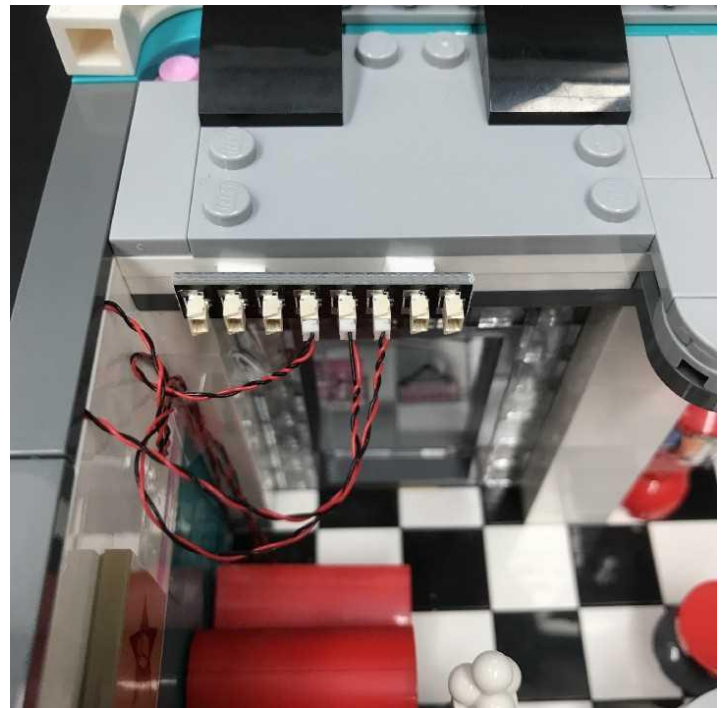
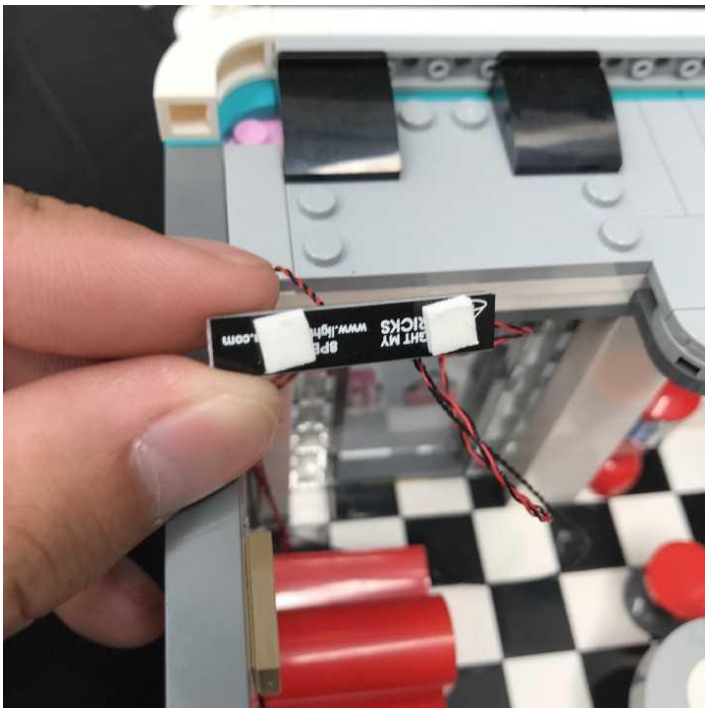
Take the 8-Port Expansion Board and then connect the two cables from the jukebox as well as the lamp post cable to the inside ports.



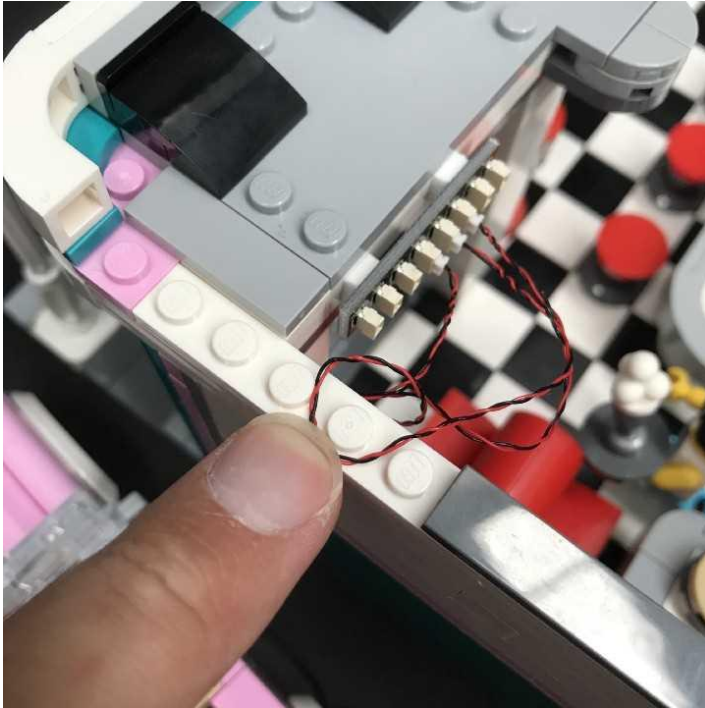
Pull the three cables up the corner of the diner and then use tape to secure them down.



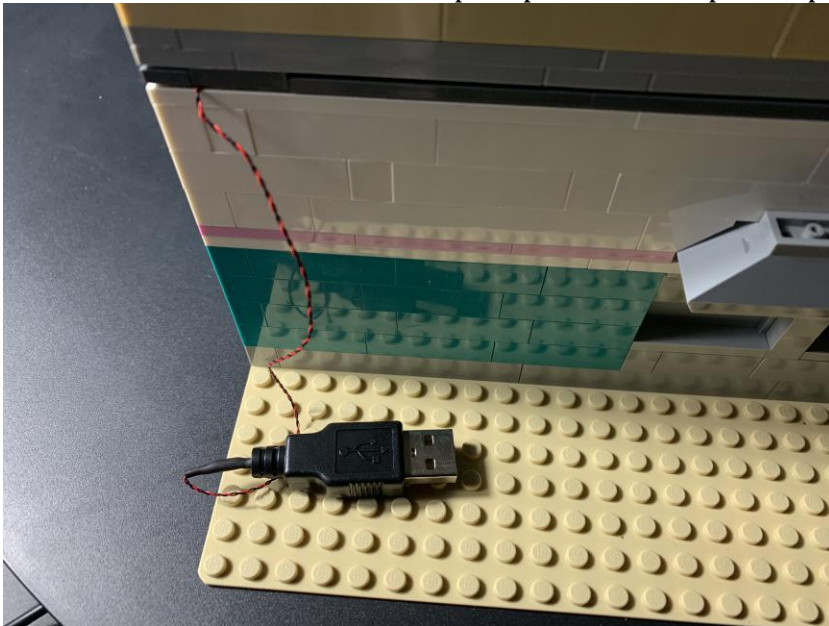
Using 2x Adhesive Squares, mount the expansion board to the inside of the diner in the following position.



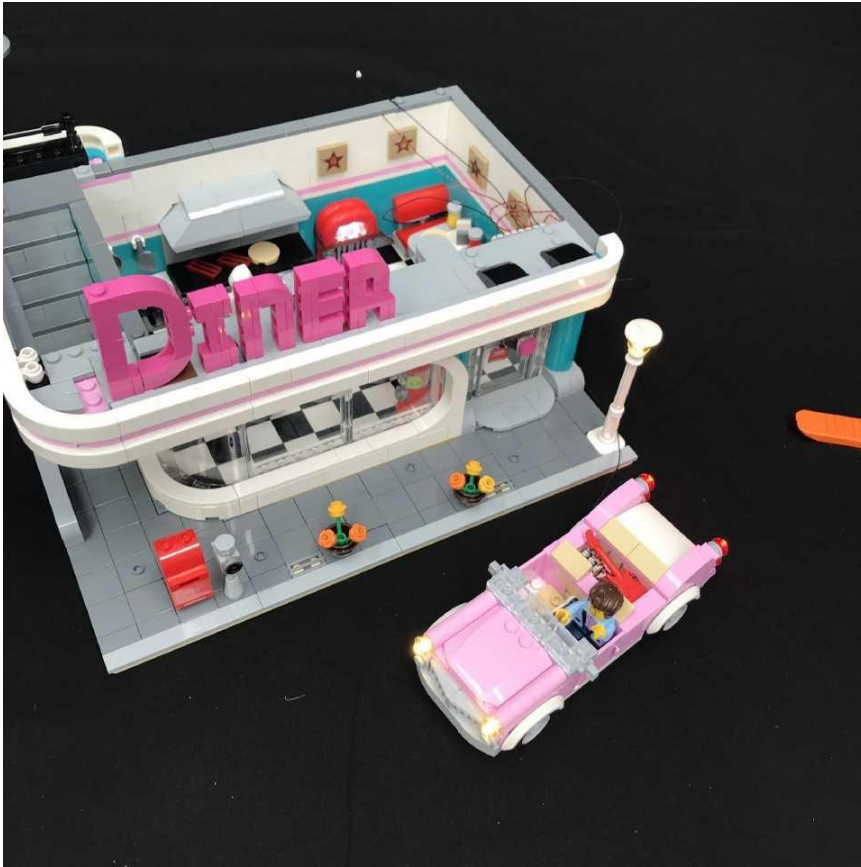
To prevent cables from dangling down you can secure them underneath the top tiles by laying them in between studs.



Take the USB cable and then place it behind the Downtown Diner as per below. Bring the cable over the wall and then connect it to a spare port on the 8-port Expansion Board.



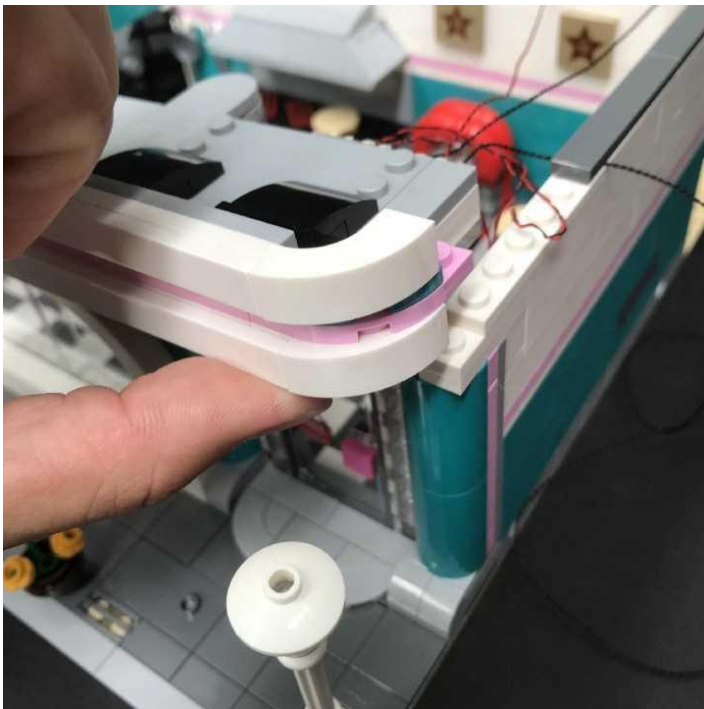
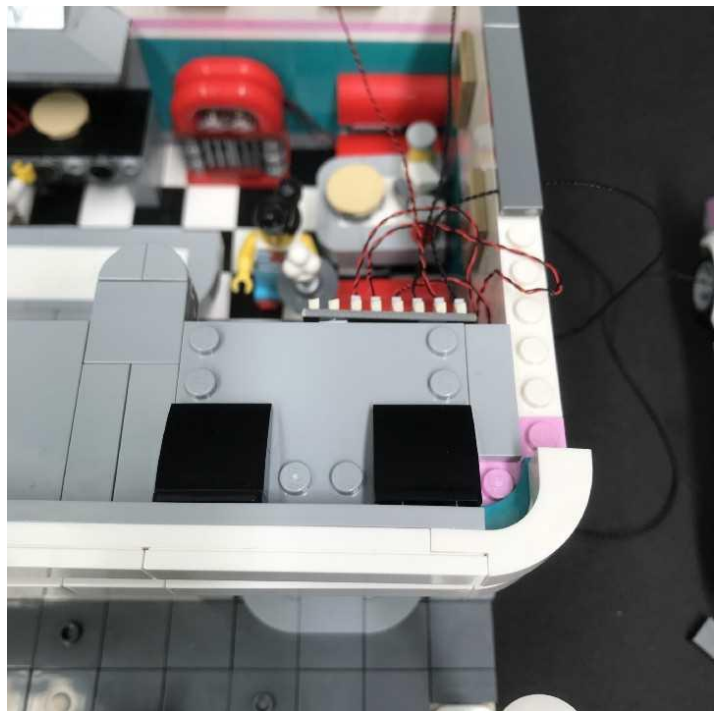
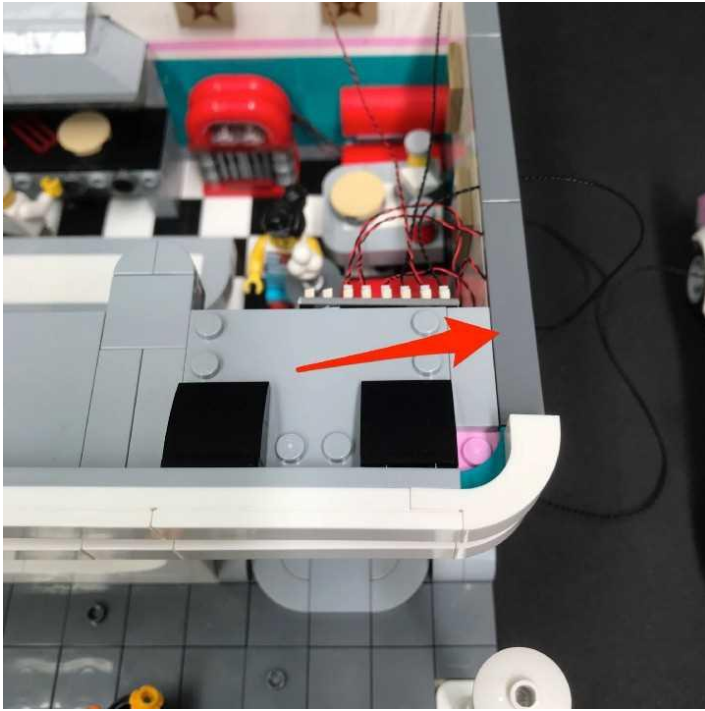
Connect the power supply and ensure the lights we have installed so far are working OK.



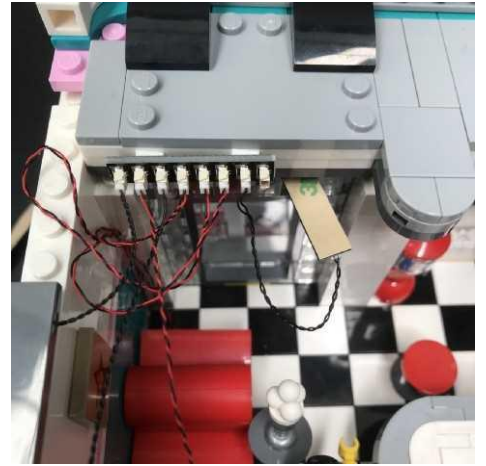
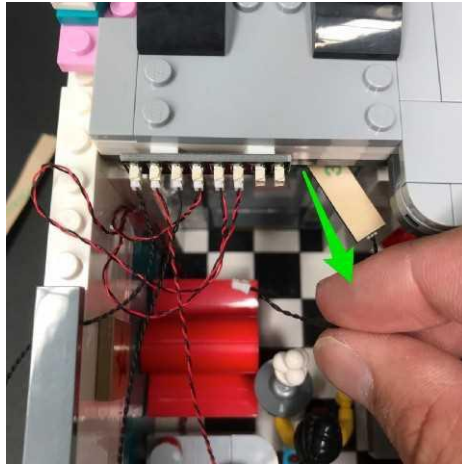
Take 3x White Strip Lights and 3x 5cm Connecting Cables and connect all the strip lights together leaving one side of a 5cm connecting cable disconnected.



First disconnect the following tile on the front right section of the Diner and then lift up the top section to create a gap underneath as per below:



Insert the end of the 5cm connecting cable through this space and then pull the cable up from the inside of the Diner. Connect this cable to the 8-port expansion board inside.



Pull the first Strip Light all the way out from the front of the Diner and then using it's adhesive backing, stick it underneath the top section on the eave right above the front door.





Reconnect the top section and tile we removed in step 8.



Stick the other two light strips along the eaves to the position shown below.



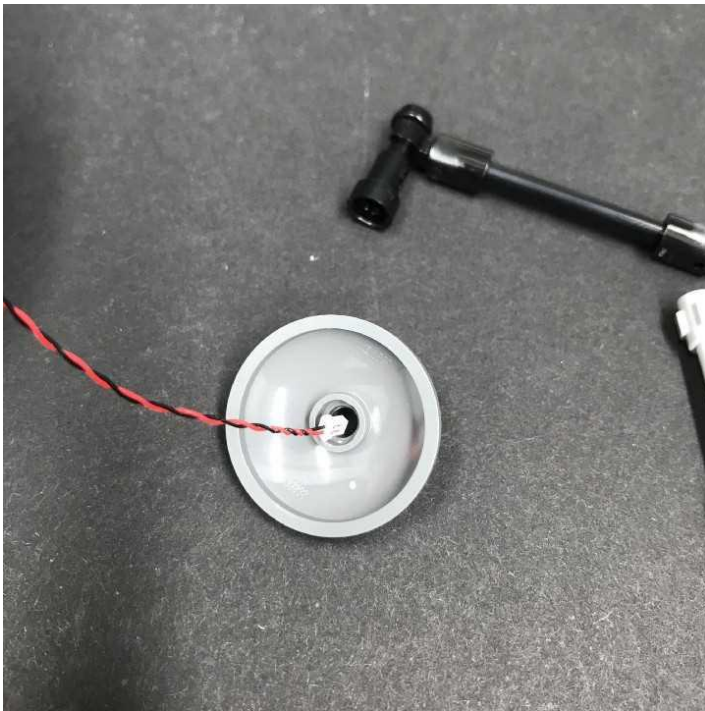
We will now install a light to the lamp post on the left corner of the second koor. First disconnect the rails on each side, followed by the lamp post.



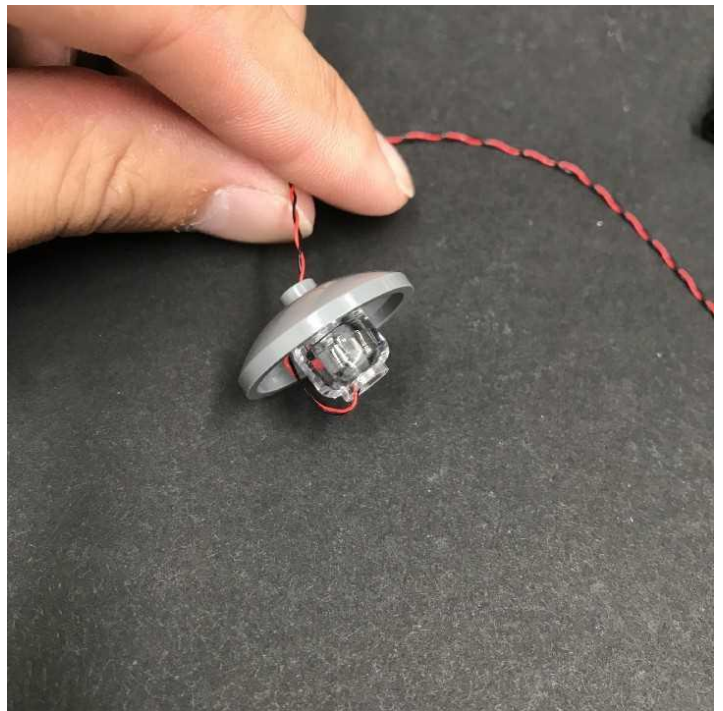
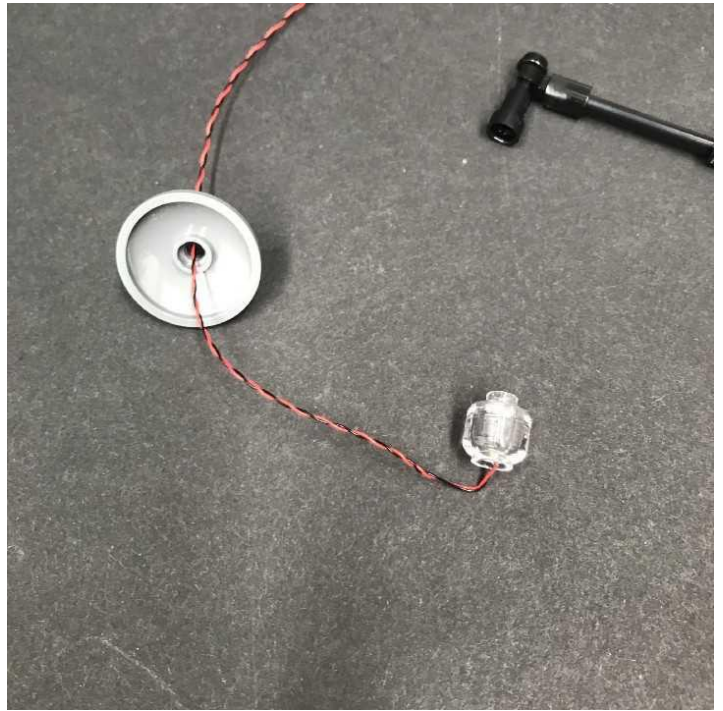
Disconnect the trans clear minifigure head as well as the dish above.



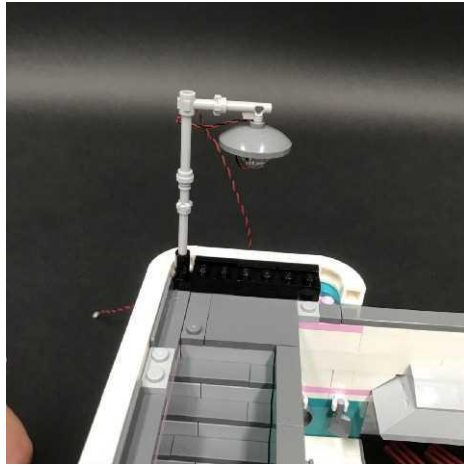
Take a White 30cm dot Light and then thread the connector side through the bottom of the dish piece.



Place the other end of the dot Light inside the bottom of the trans clear minifigure head and then from the top of the dish, pull the cable all the way up and then reconnect the two together. This should secure the dot Light in place and look similar to below:



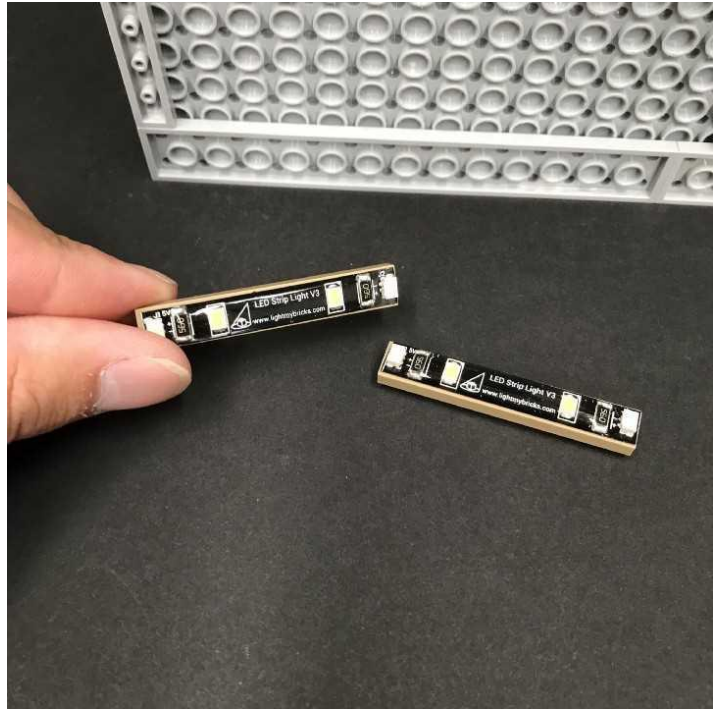
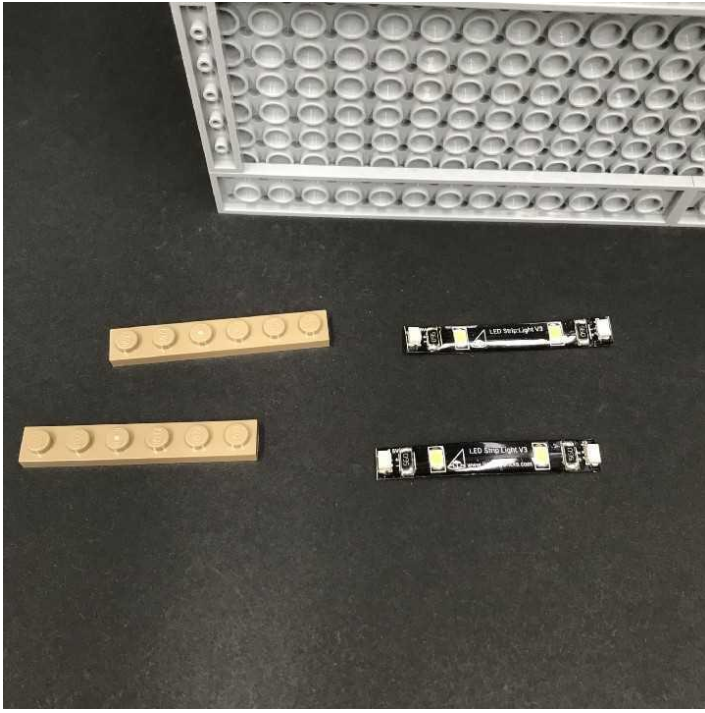
Reconnect the dish to the lamp post and then reconnect the lamp post and rails back to the second koor.



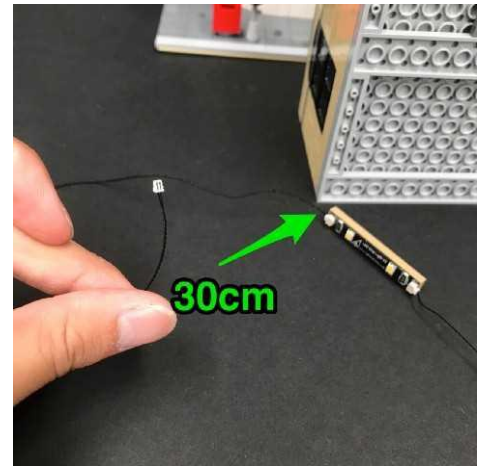
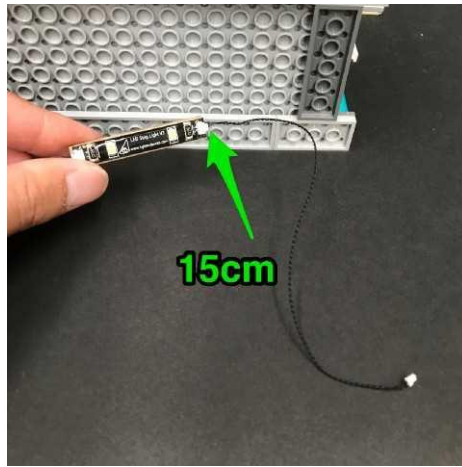
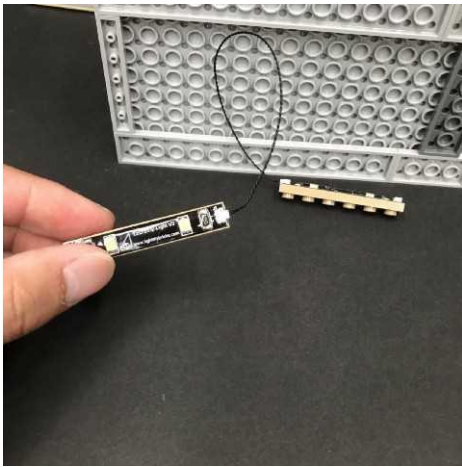
We will leave this section for now as we will connect the lamp post cable to the top koor later.
Take the entire second koor and the place it on it's side as per below:



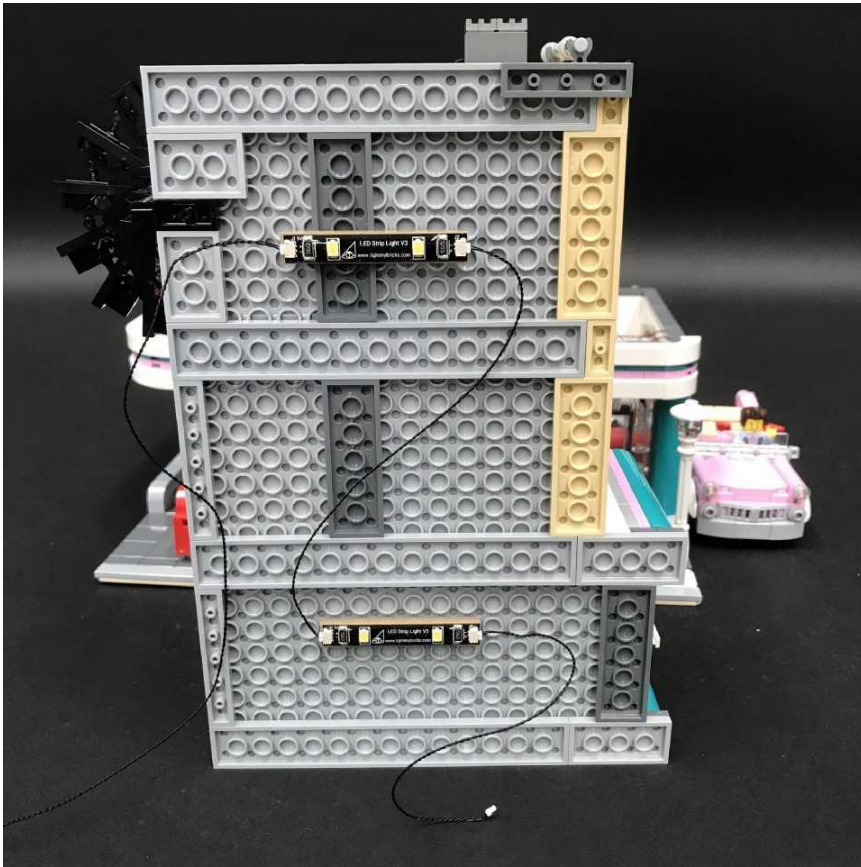
Take 2x White Strip Lights and then stick them to 2x provided LEGO Plates 1x6.



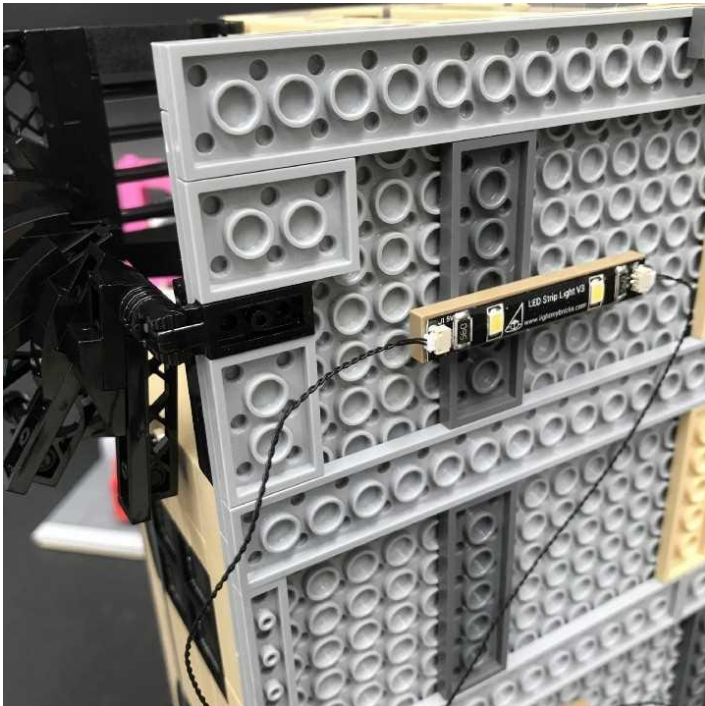
Take a 15cm Connecting Cable and connect the two strip lights together. Take another 15cm Connecting Cable and connect it to other end of one of the strip lights and then connect a 30cm Connecting Cable to the end of the other strip light.



Mount the two Strip Lights underneath the second koor in the following positions. Ensure the strip light with the 30cm connecting cable is positioned on top and the strip light with 15cm connecting cable is positioned below. Also ensure the cables are facing the exact way as below.



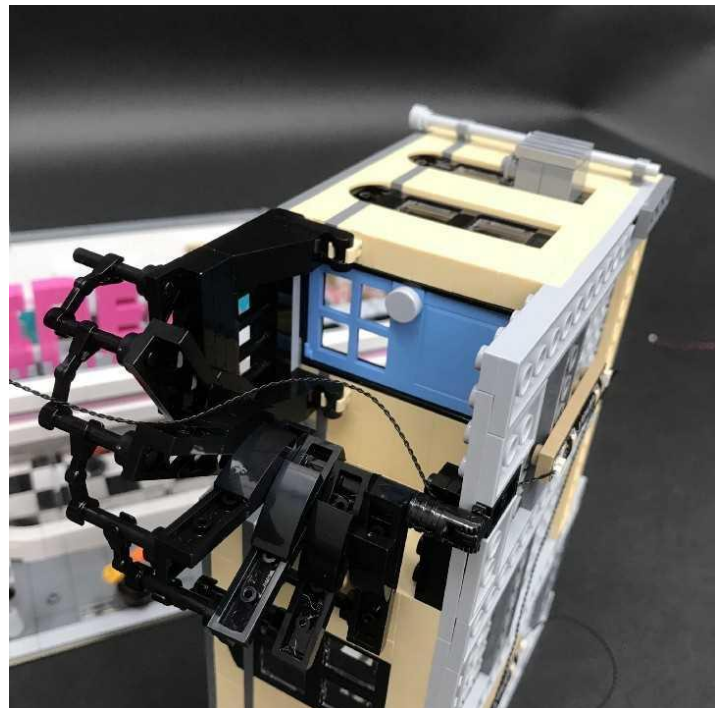
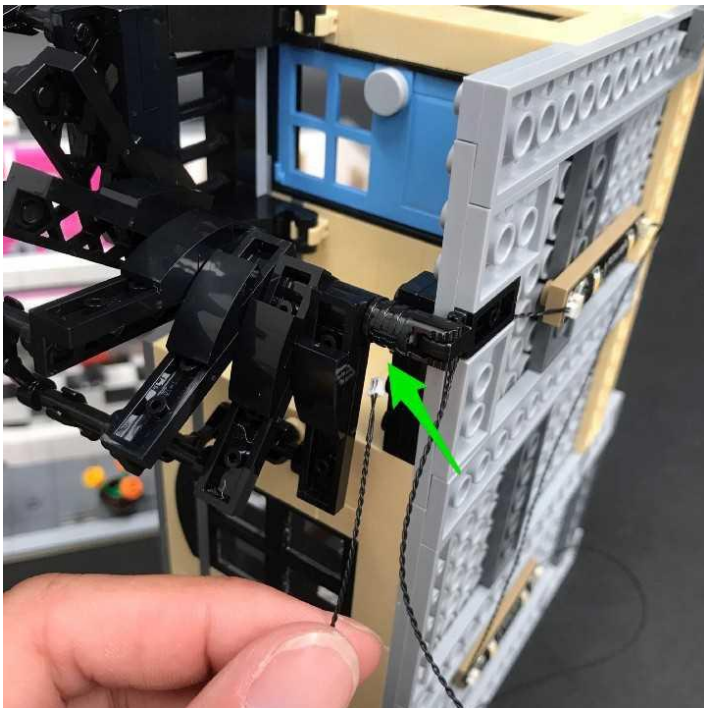
Secure the 30cm Connecting cable by laying it underneath the 2x3 plate.



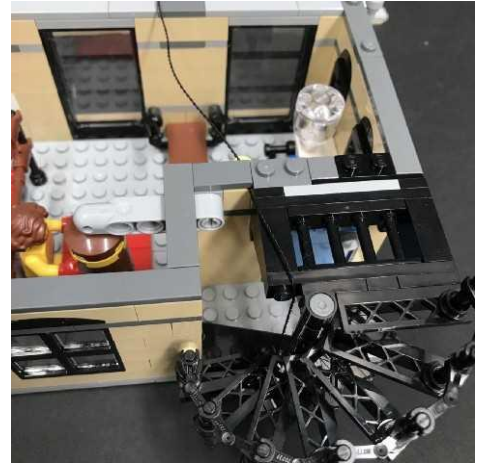
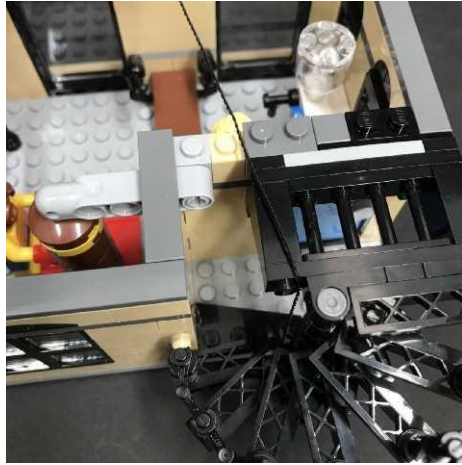
Secure the 15cm Connecting Cable that connects the two strip lights underneath the 2x6 plate. Securing these connecting cables will also prevent them from dangling down and being seen from the outside looking in.



Thread the other end of the 30cm connecting cable through the space in between the base and first step of the staircase.



Pull the cable all the way up from above the second koor and then lay it across toward the inside of the building. Secure it in place by laying it under the 1x2 tile on the top of the second koor.



Take the entire second koor above the first koor and then connect the other end of the 15cm connecting cable from the strip light underneath to a spare port on the expansion board below.



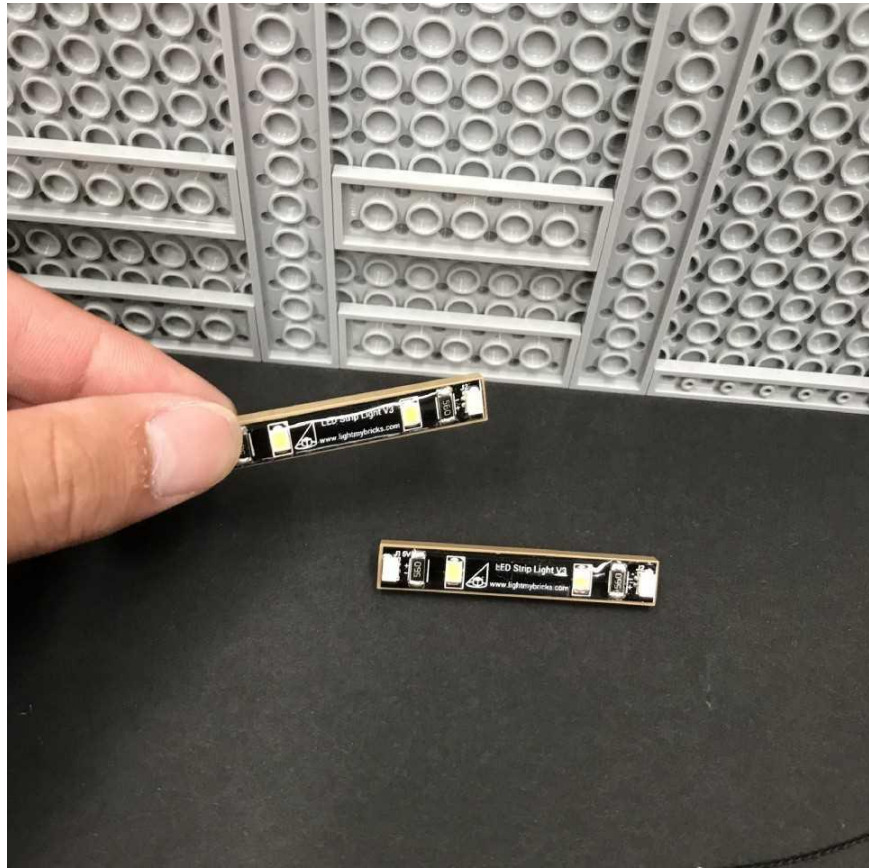
Securely connect the second koor in place and then turn on the battery pack to test all the lights we have installed so far are working OK.



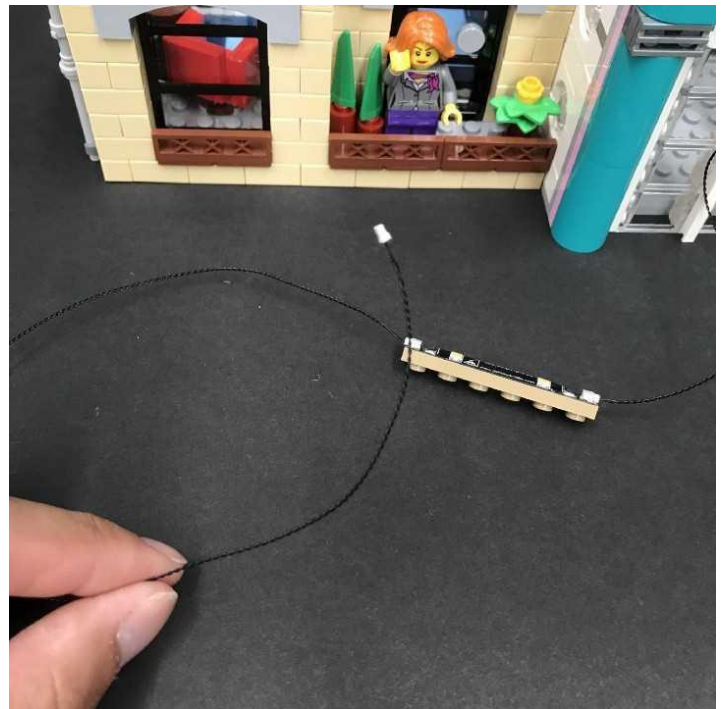
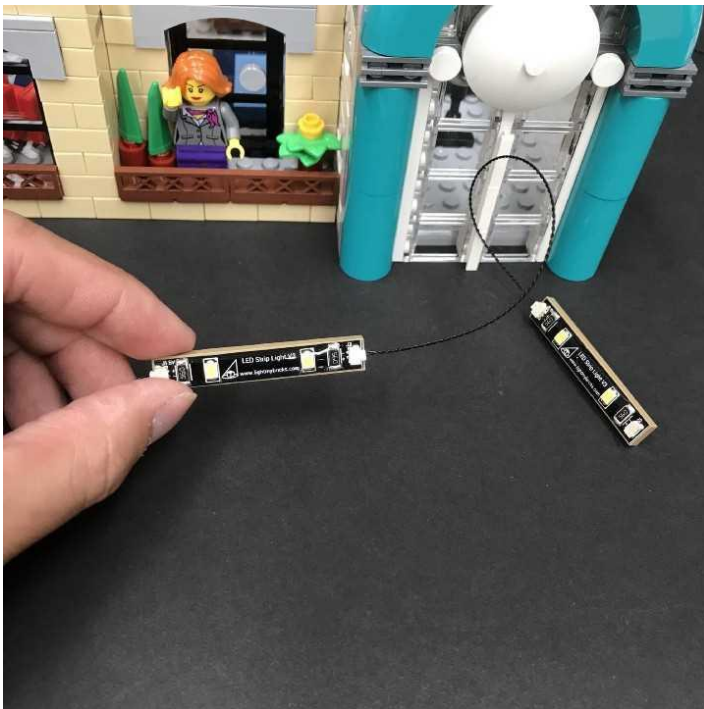
Take the entire third koor and then place it on it's back so we can access underneath.



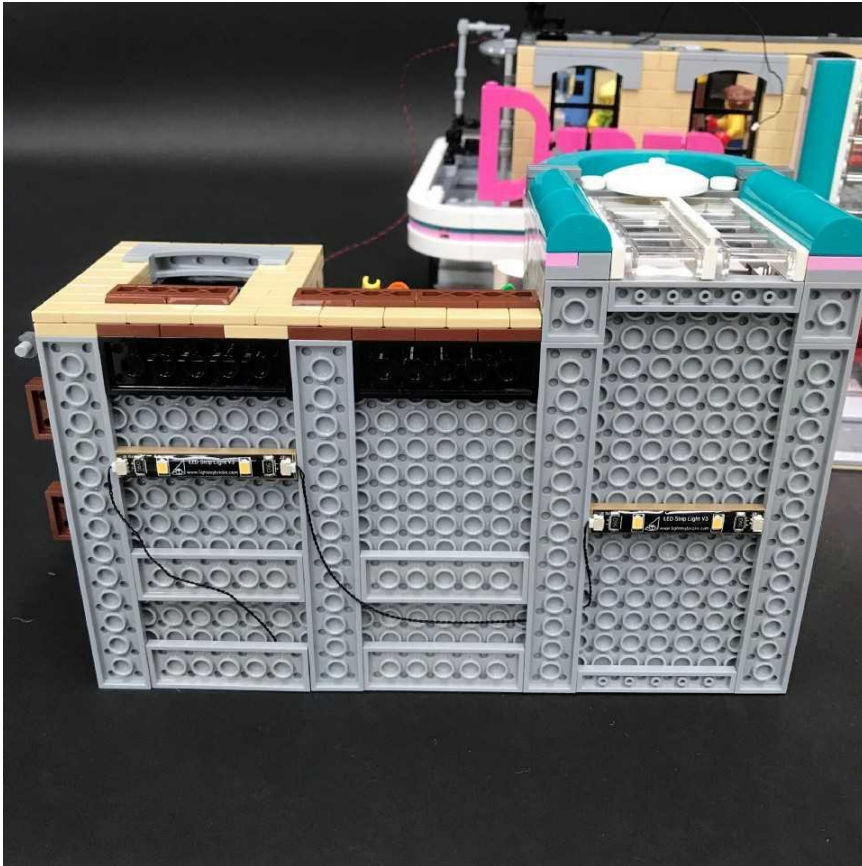
Take another 2x White Strip Lights and then stick them to another 2x LEGO Plates 1x6.



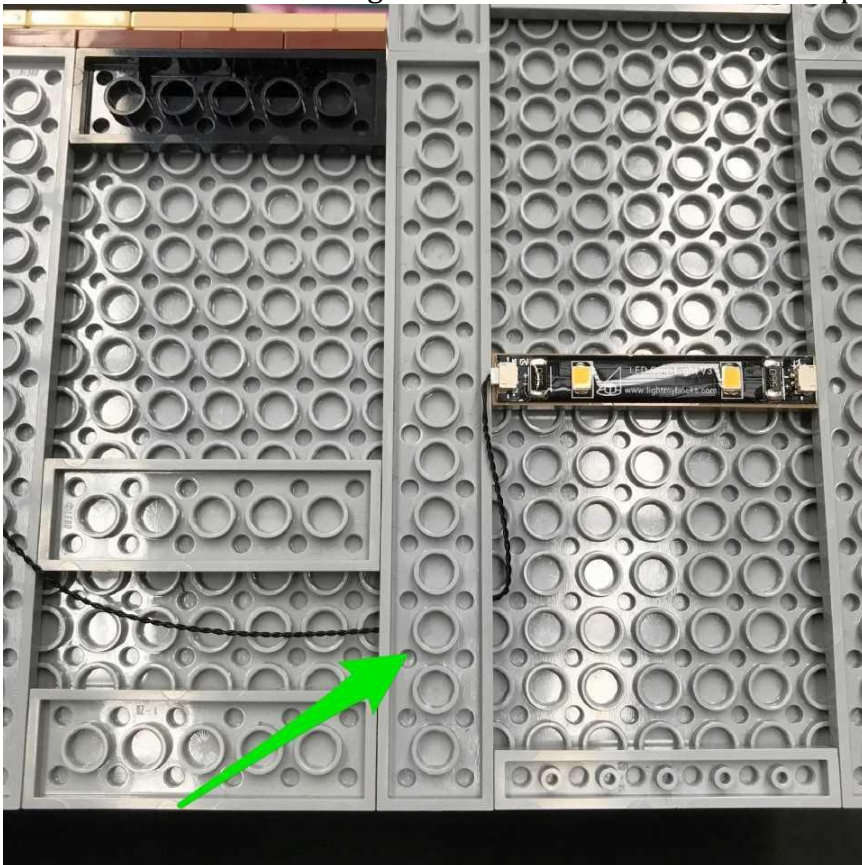
Connect the two strip lights together using a 15cm Connecting Cable and then connect another 30cm Connecting Cable to the end of one of the strip lights.



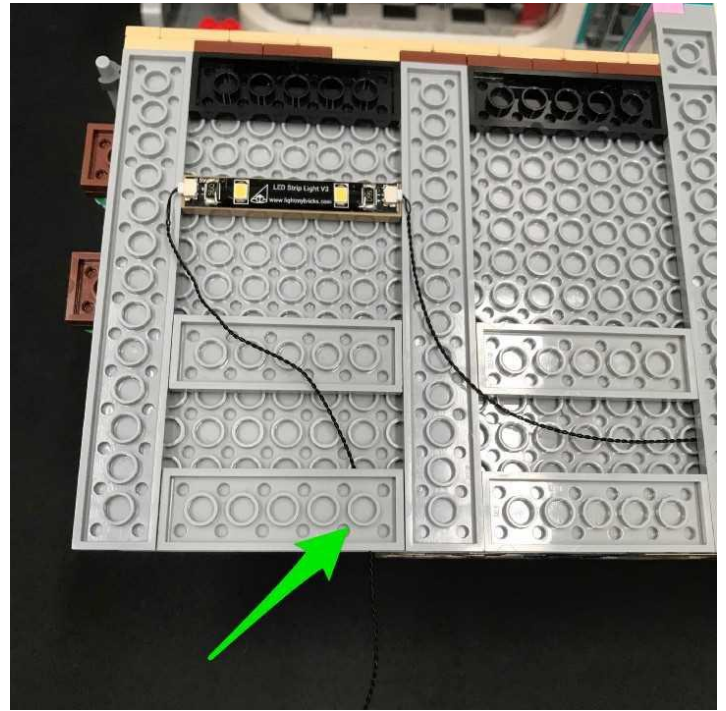
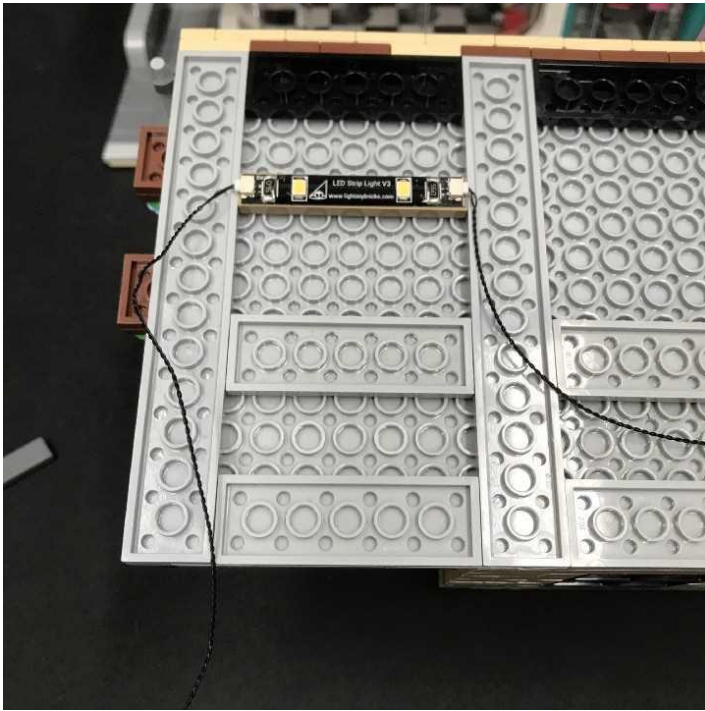
Mount the two strip lights underneath the 3rd koor in the below position ensuring the strip light with the 30cm connecting cable is positioned on the left.



Secure the 15cm connecting cable which connects the two strip lights together underneath the 2x14 plate:

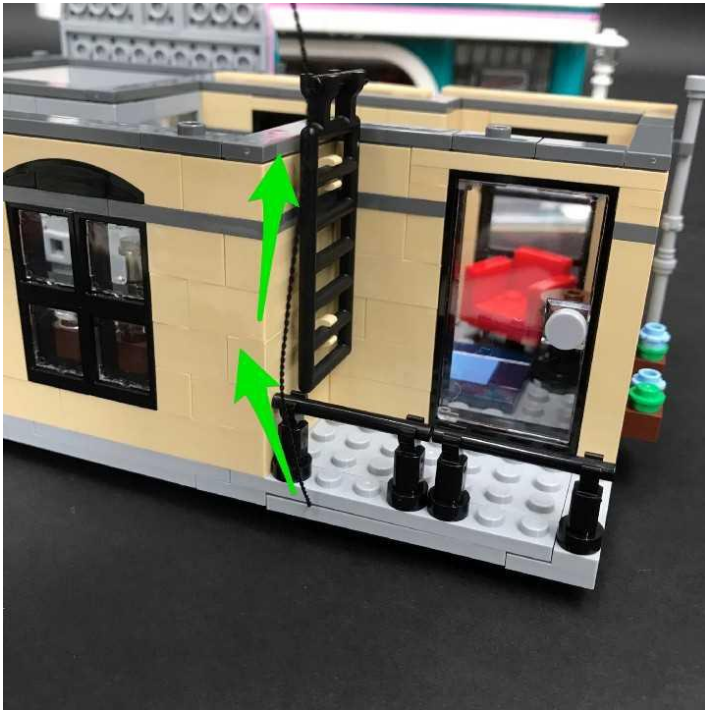


Take the 30cm Connecting cable and then secure it underneath the 2x6 plate at the bottom as per below:

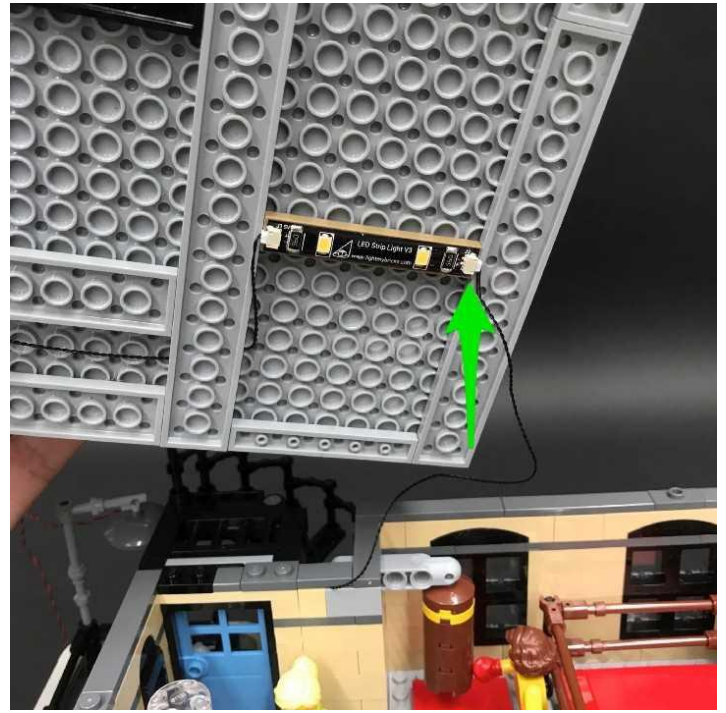


Turn the third koor over to the top side and then pull the other end of the 30cm connecting cable up from the back of the third koor.

Thread the cable through the space in between the rail and then up the ladder. Secure the cable in place by laying underneath the 1x4 tile on the top of the koor.



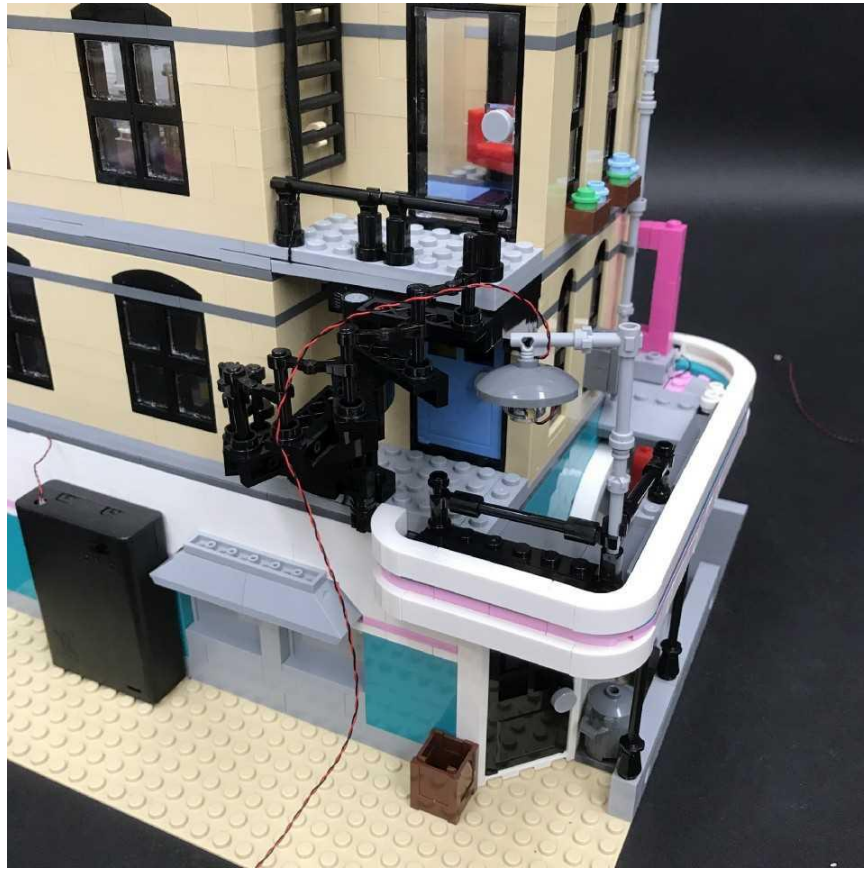
Take the entire third koor above the second koor and then locate the other end of the 30cm connecting cable from underneath (second koor). Connect this cable to the spare port on the right strip light underneath the third koor.



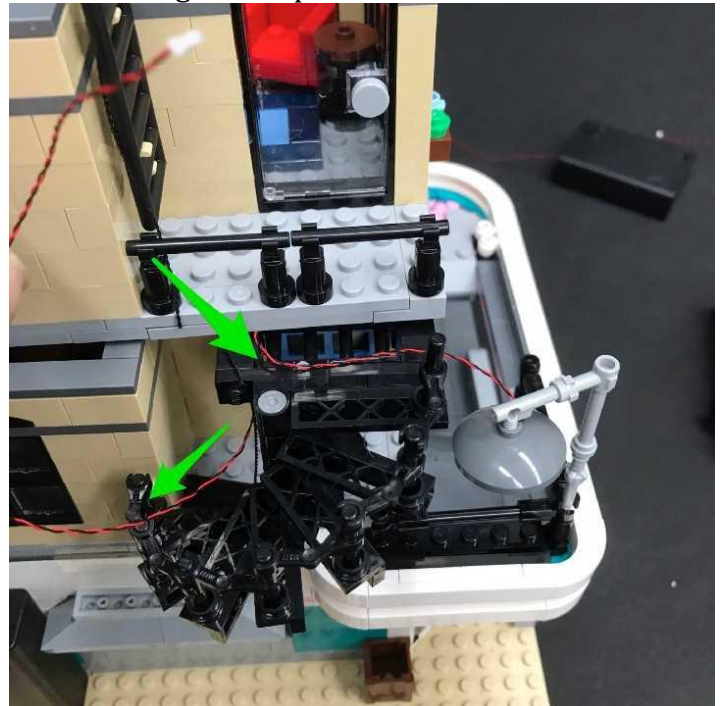
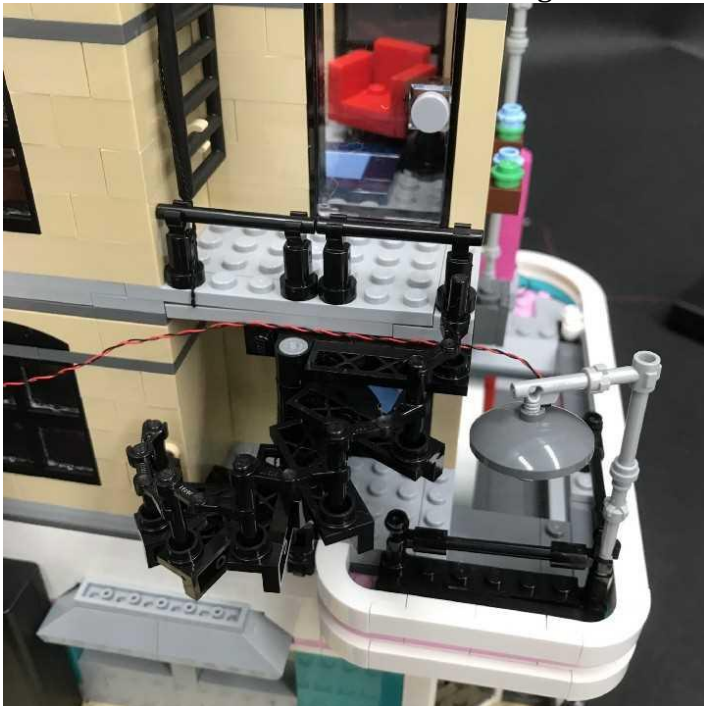
Securely connect the third koor to the second koor and then turn on the battery pack to confirm all the lights are working OK.



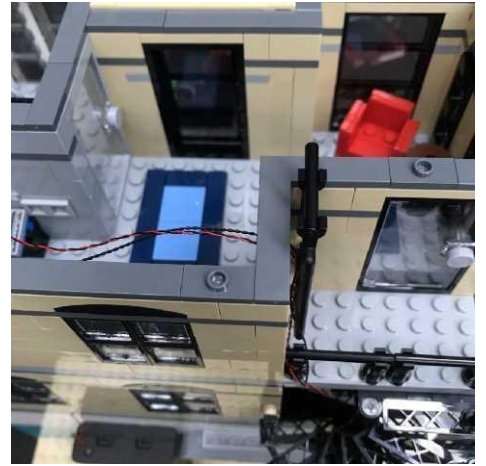
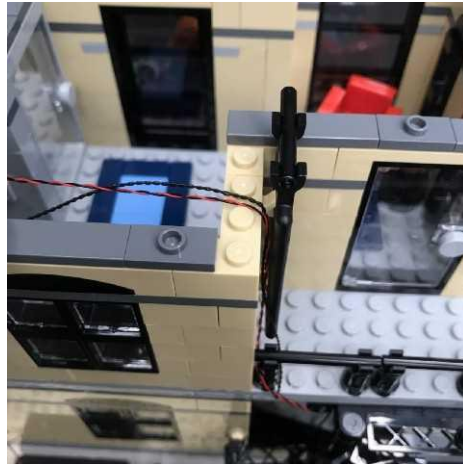
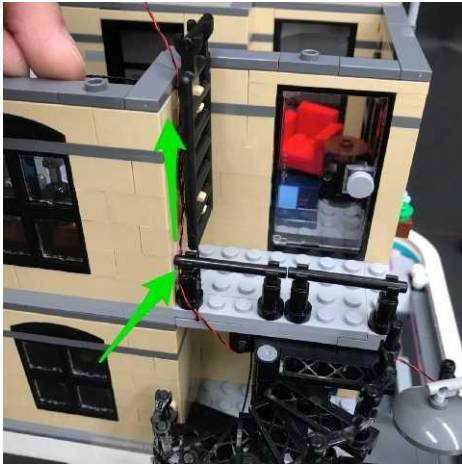
Turn the building around to the back and then locate the dot Light cable from the lamp post on the second koor.



Pull the cable across toward the building and then thread it through the top of the stair case.



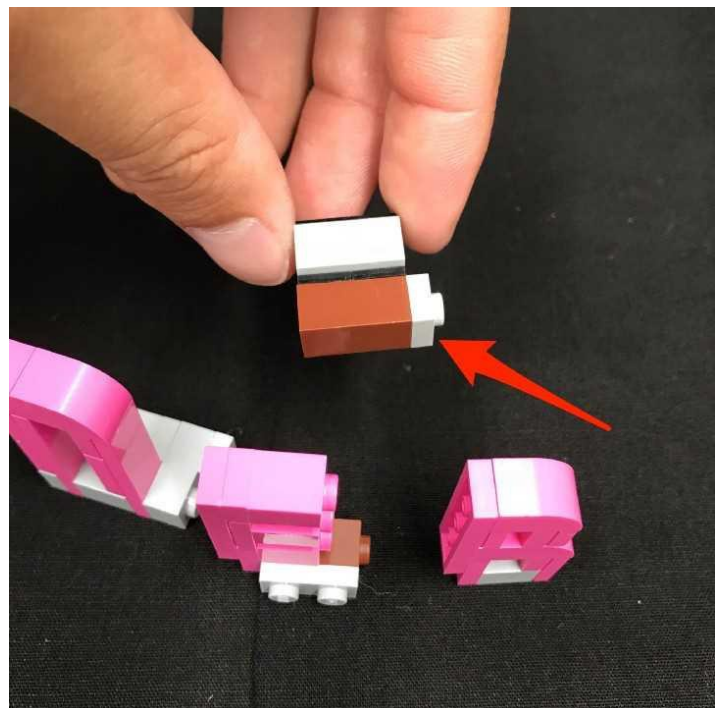
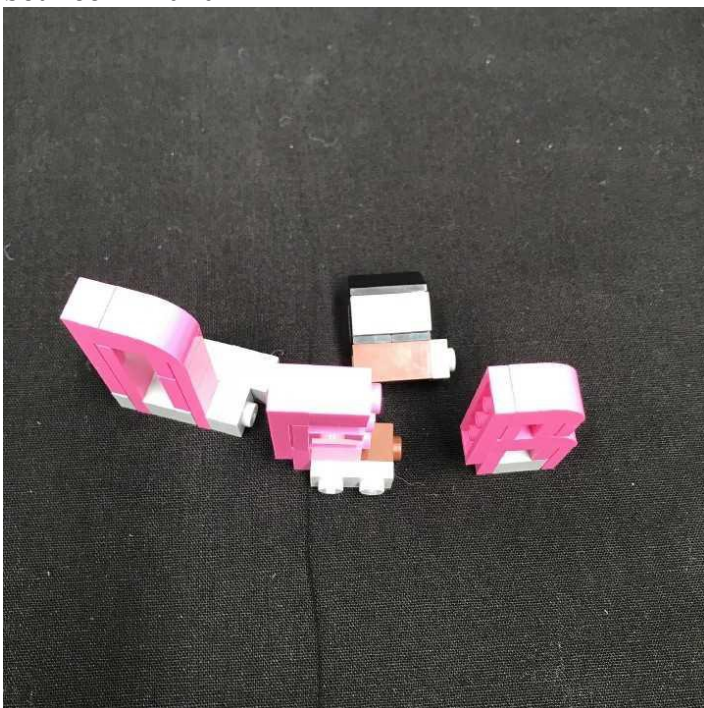
Pull the cable up the the side of the building and then thread it through the top of the ladder. Pull the cable over the wall and then secure it underneath the 1x4 tile on the top of the third koor.

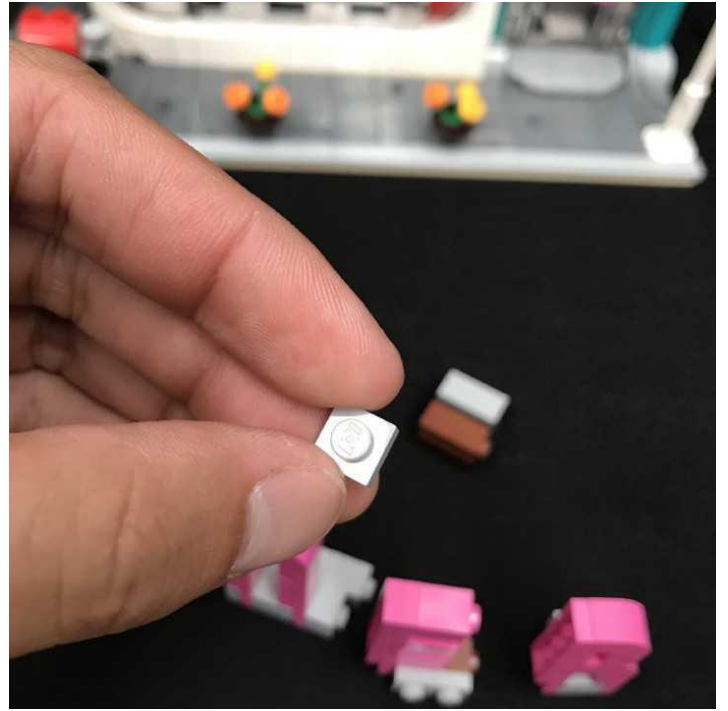
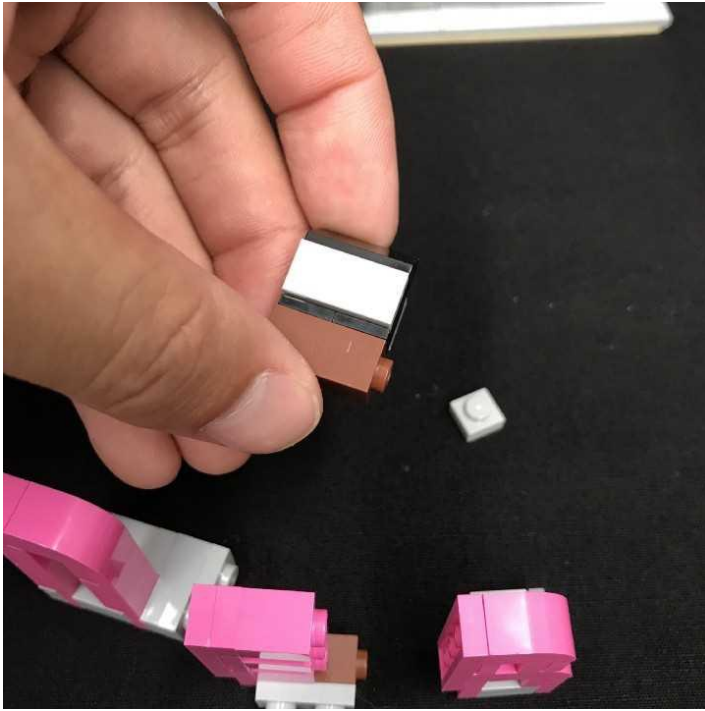


We will now slightly modify the 'Diner' sign on top of the first koor so that it sits slightly back from original position. We need to create this little gap in order for us to install strip lights to shine on the sign. To start, first disconnect both sections of the sign.

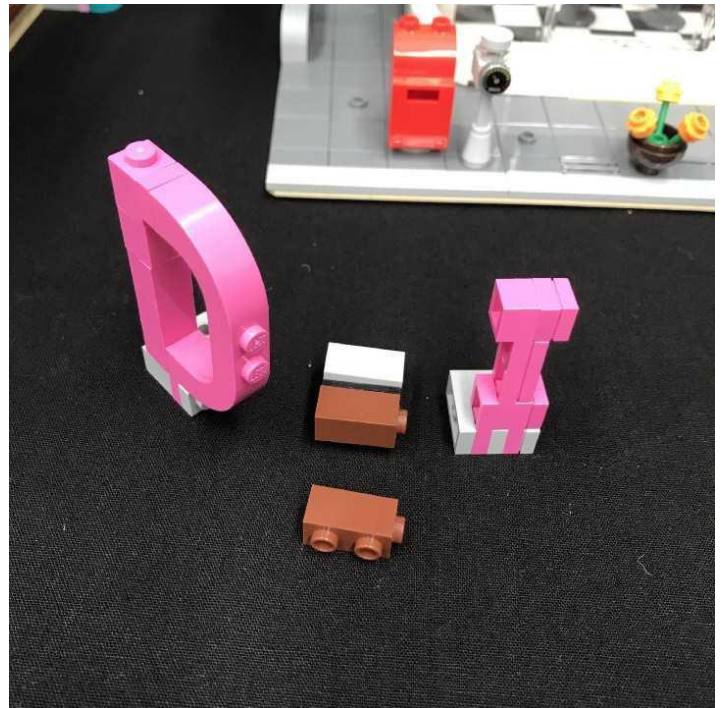


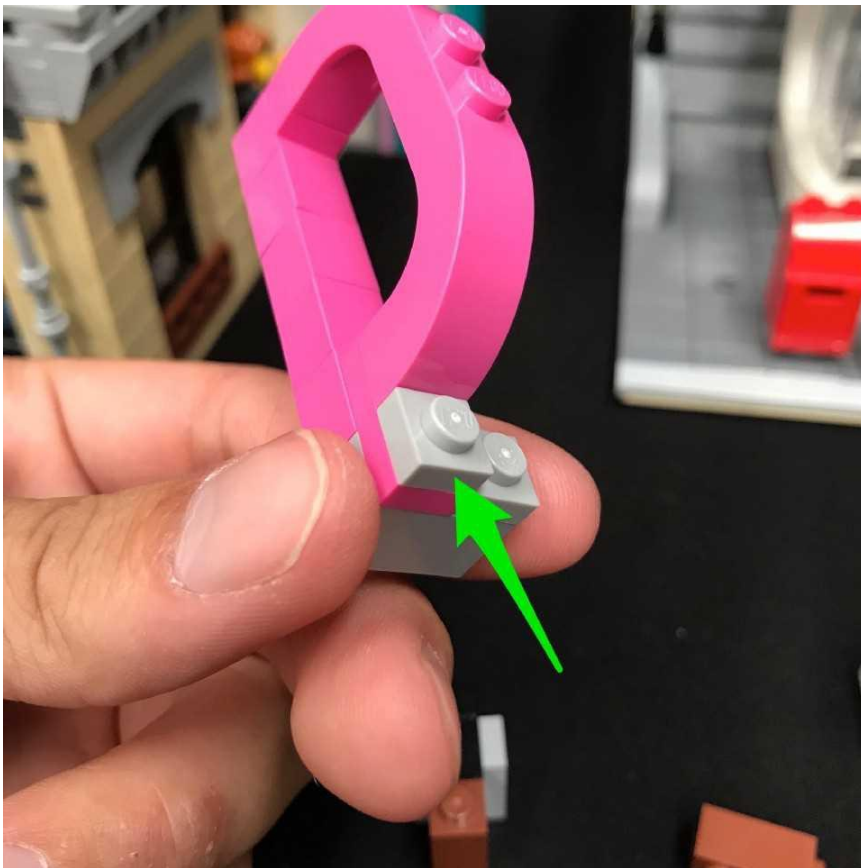
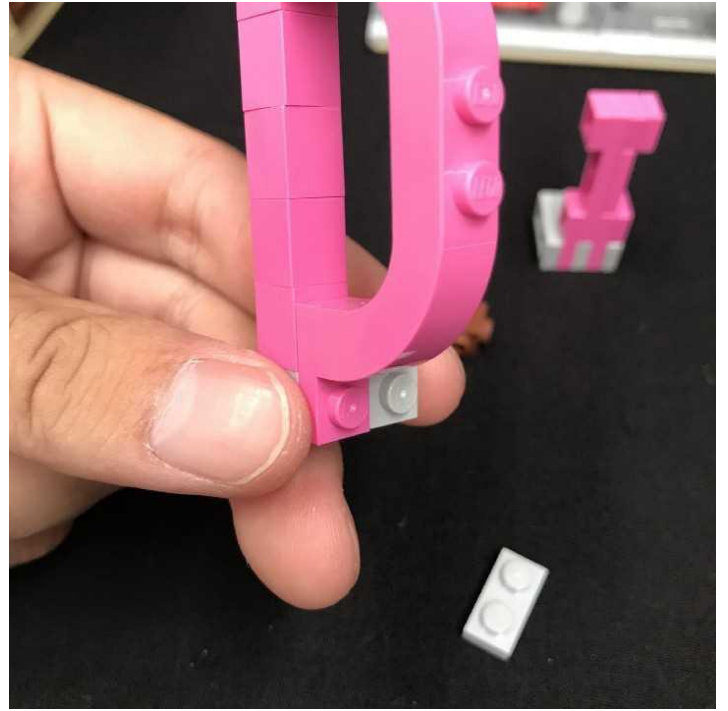
Separate the letters 'n', 'e', and 'r' and then disconnect the light grey 1x1 plate from the section in between 'e' and 'r'. Hold onto this 1x1 plate as we will bring this over and use this to connect to the section in between 'D' and 'I'.



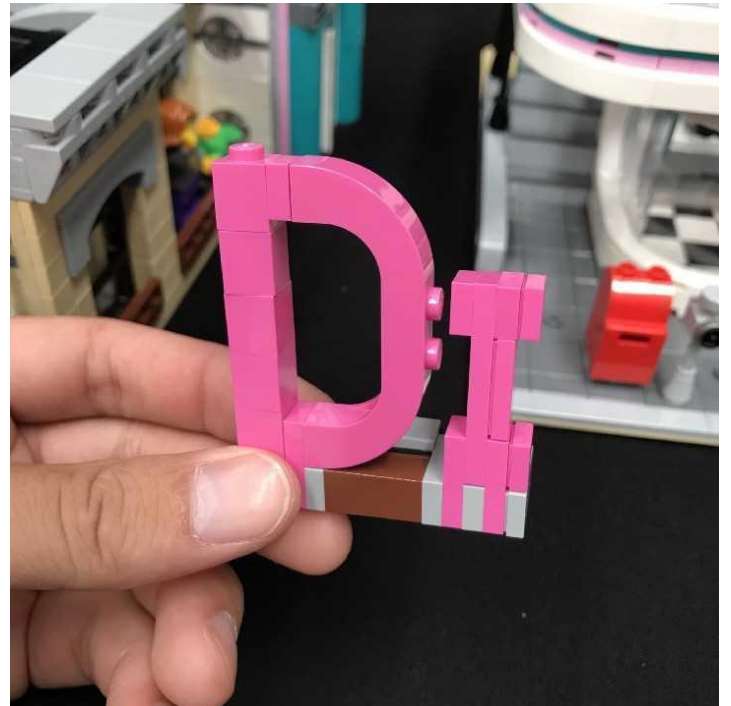
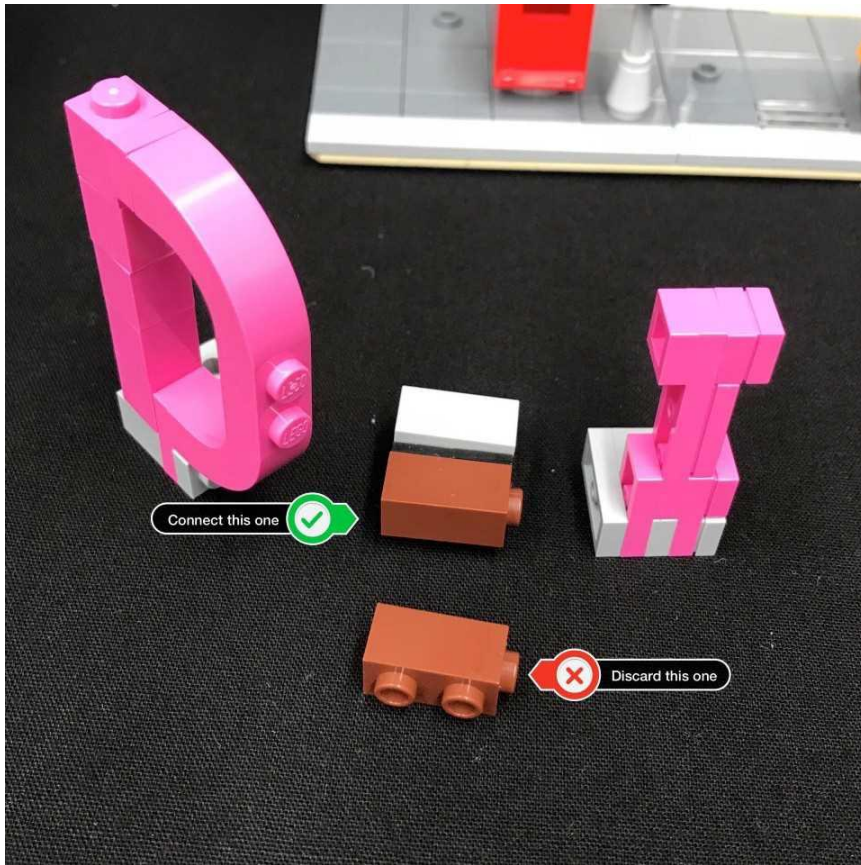


Disconnect the 2 sections in between letters 'D' and 'I' and then remove and discard the light grey 1x2 plate from the bottom of letter 'D'. Take the light grey 1x1 plate we disconnected earlier and then connect it to the pink stud at the lower front of the 'D'.

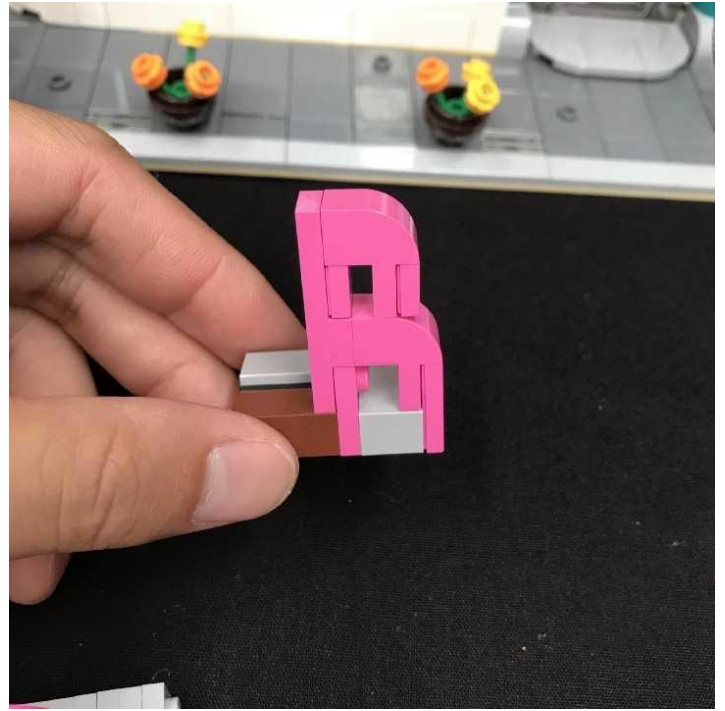
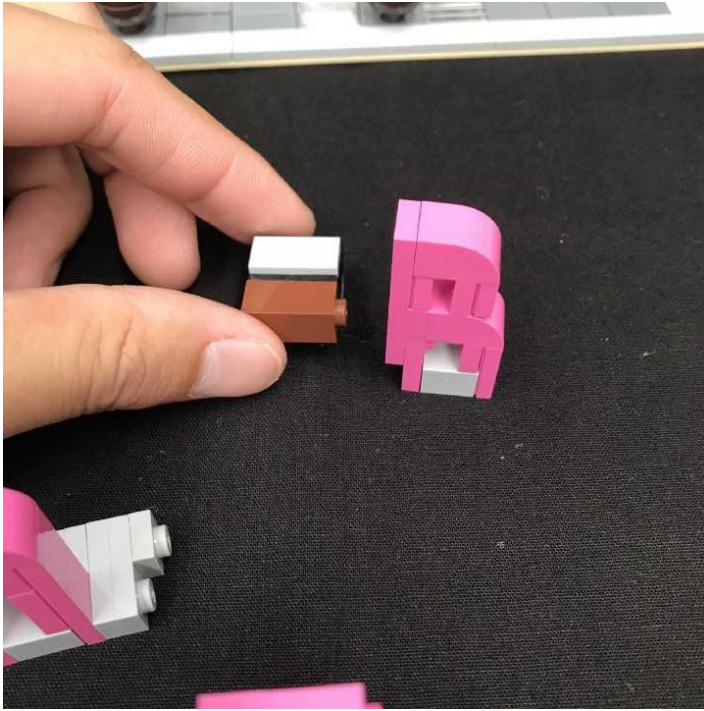




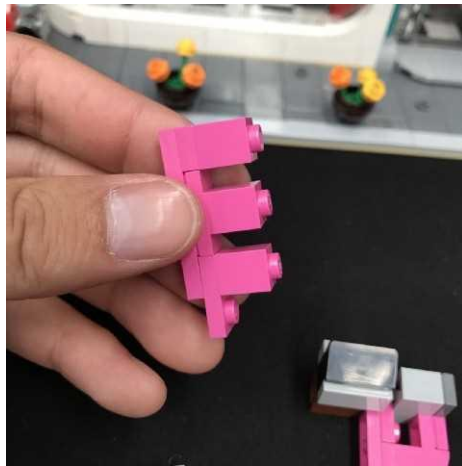
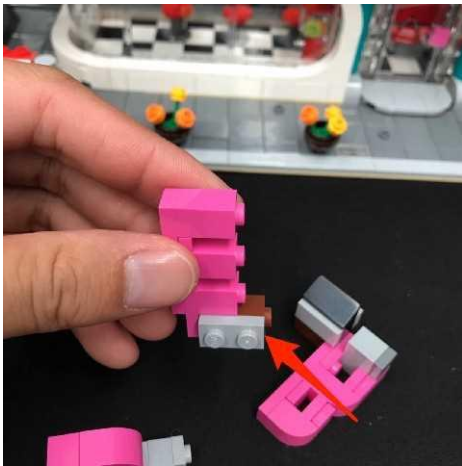
There were two sections that were in between 'D' and 'I'. Discard the front section and then replace it with just the back section to connect 'D' and 'I' together.



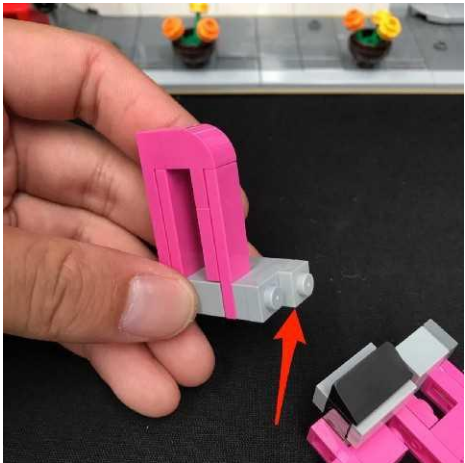
Take the 'R' and then reconnect the section in between 'R' and 'E' to the bottom left of 'R'(section we removed the 1x1 plate from).



Take the 'E' and then disconnect and discard the section connected to the bottom right then reconnect 'E' to the new section next to the 'R'



Take the 'n' and then remove the light grey 1x1 plate from the bottom right. Reconnect the 'n' to the 'E'.



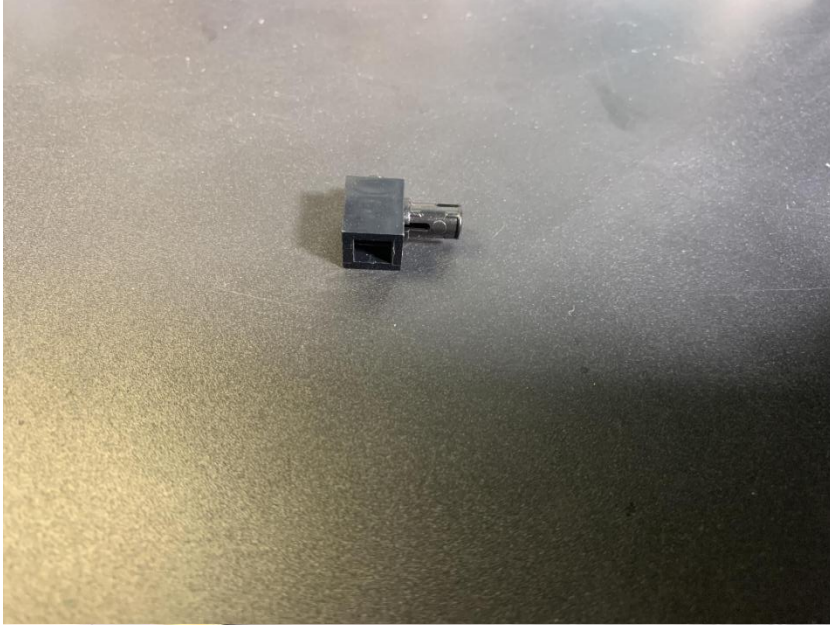
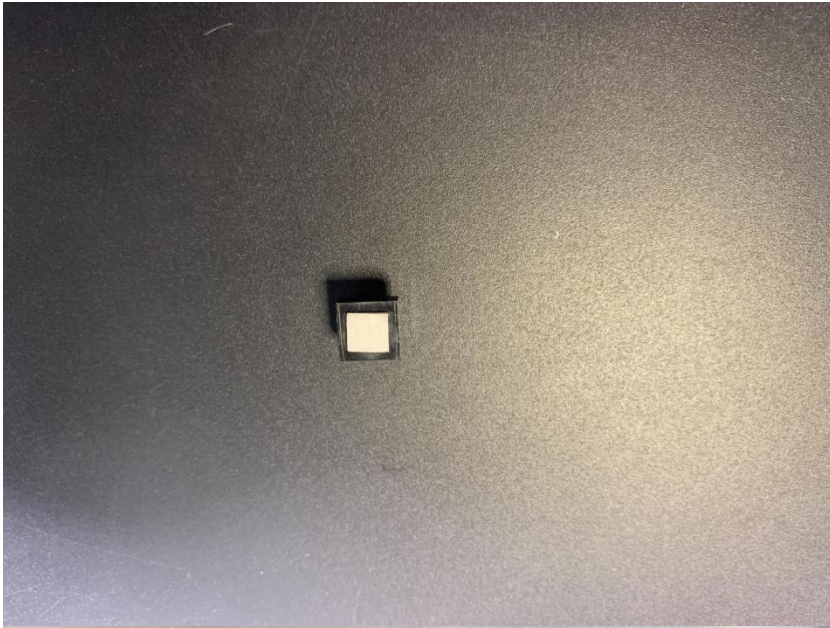
Place the two sections of the 'Diner' sign together and it should now look like below:
You should also have the same excluded pieces shown underneath. Set this 'Diner' sign aside for now and proceed to the next step.



We will now install the RGB Lights. Remove the pieces from the set below



Install the following steps in sequence

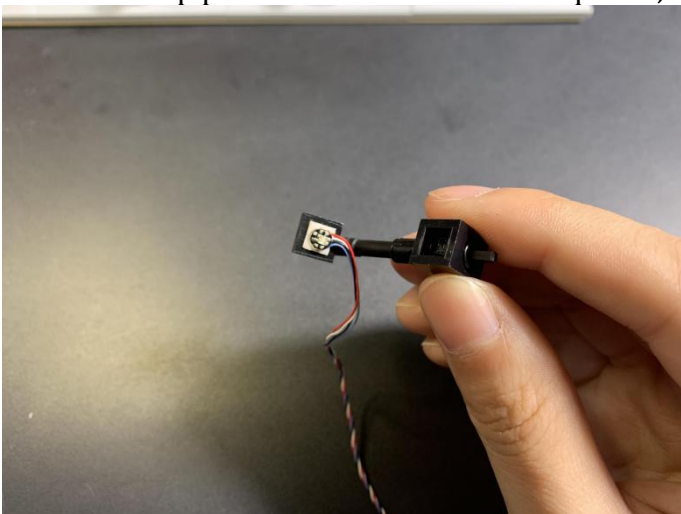


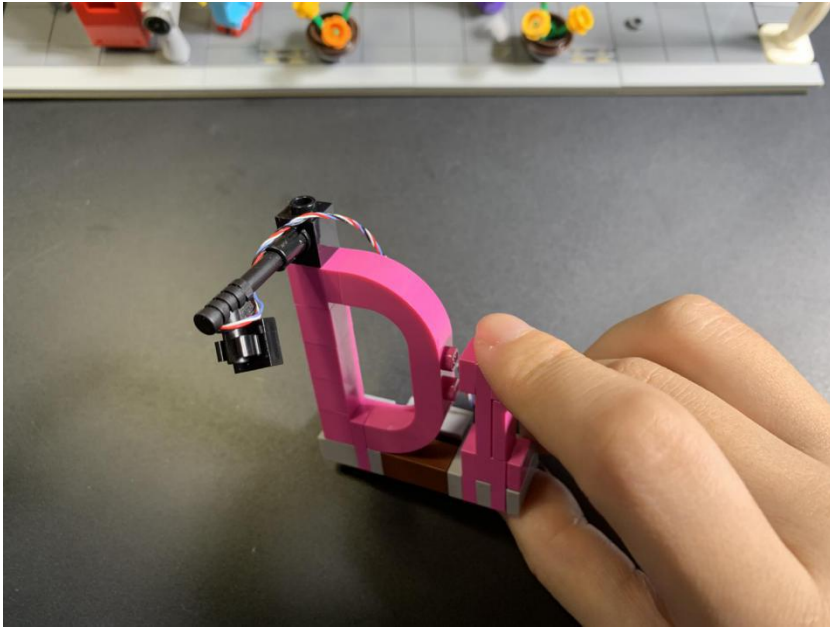


Take a RGB dot Light

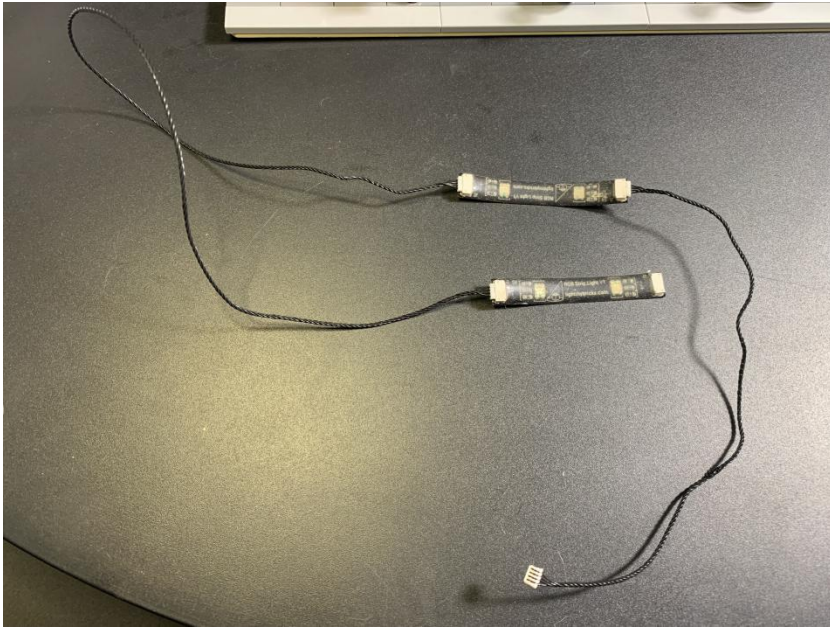


Stick the lamp particles on the Adhesive Squares, wrap it around a circle and install it on the D letter.

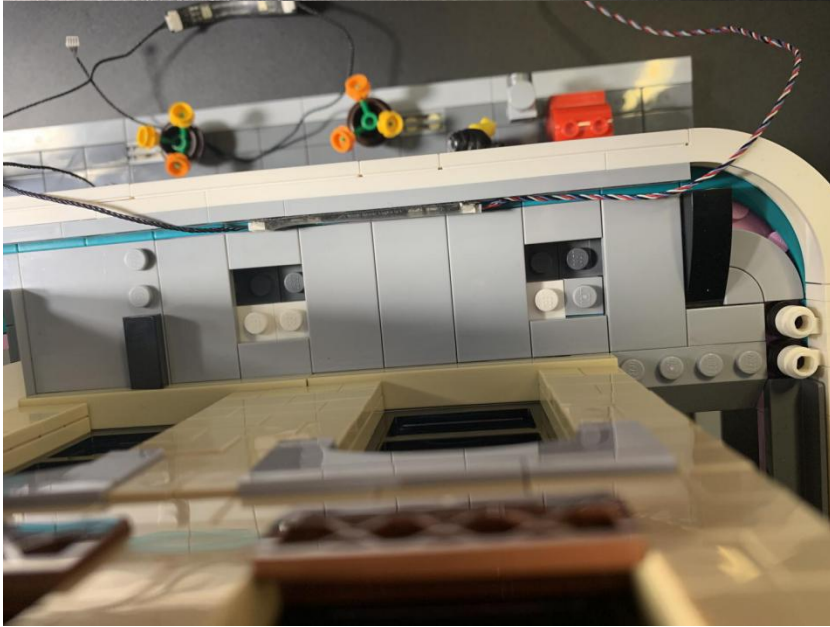
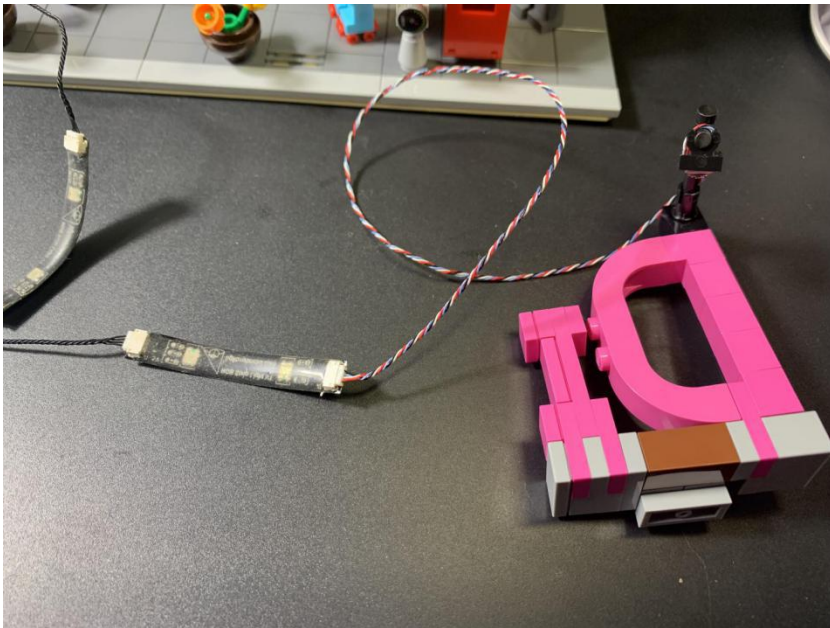




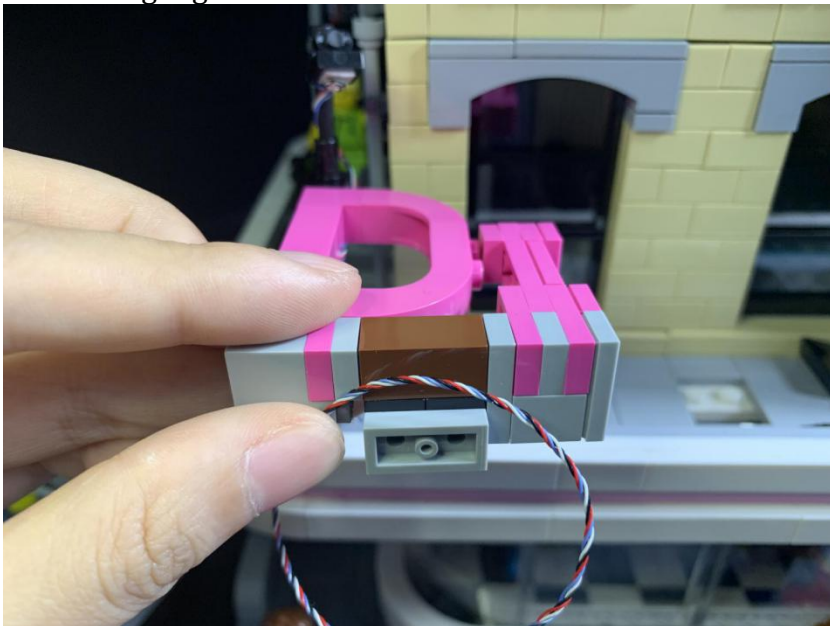
Take 2xRGB Strip Lights,1x15cm Connecting Cables,1x30cm Connecting Cables.Connect 2 lights with 30cm cable, as shown below

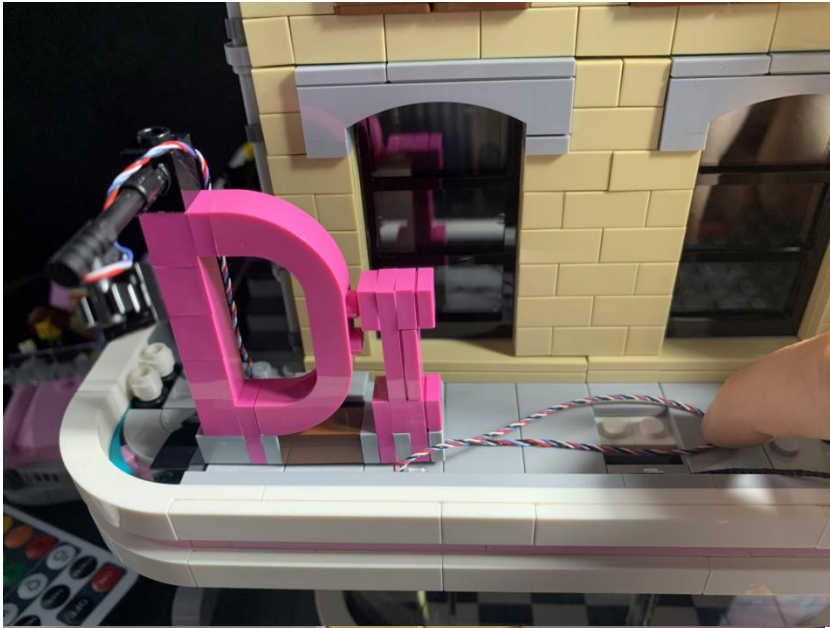


After connecting the RGB Strip lights to the RGB dot Light ,Stick the Strip light to the position facing the Diner letter, illuminate the letters

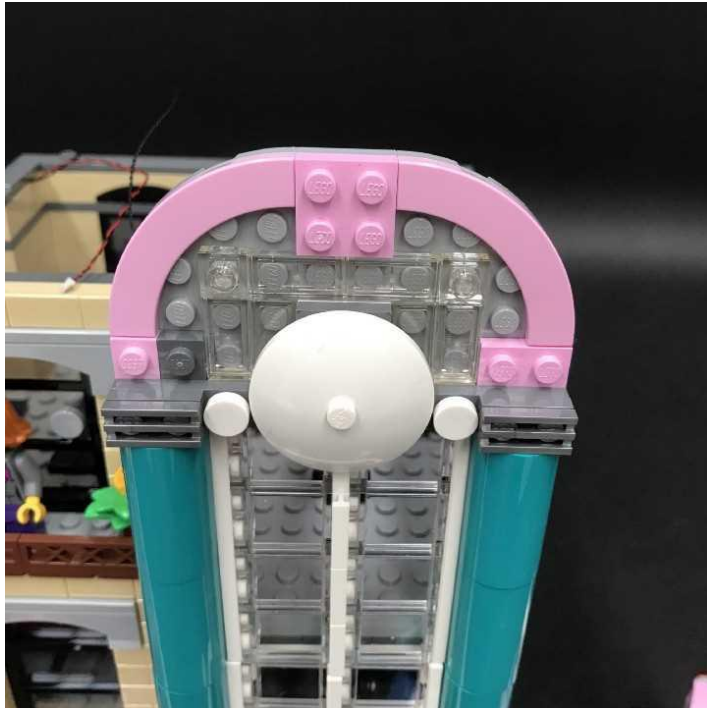


Hide the light grain under the letters

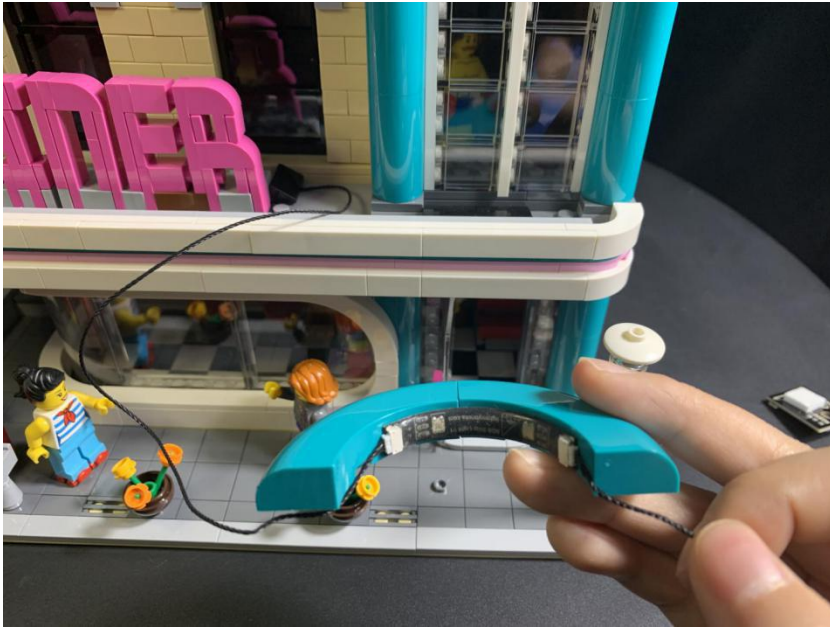




We will now install a strip light to shine down to the top of the arc of the face of the building. Remove the two pieces which make up the arc.



Take RGB Strip Light to the left port.



Reconnect the two arc pieces to the face of the building and then pull the 15 cm connecting cable and pull it inside the right rear of the building in the picture.



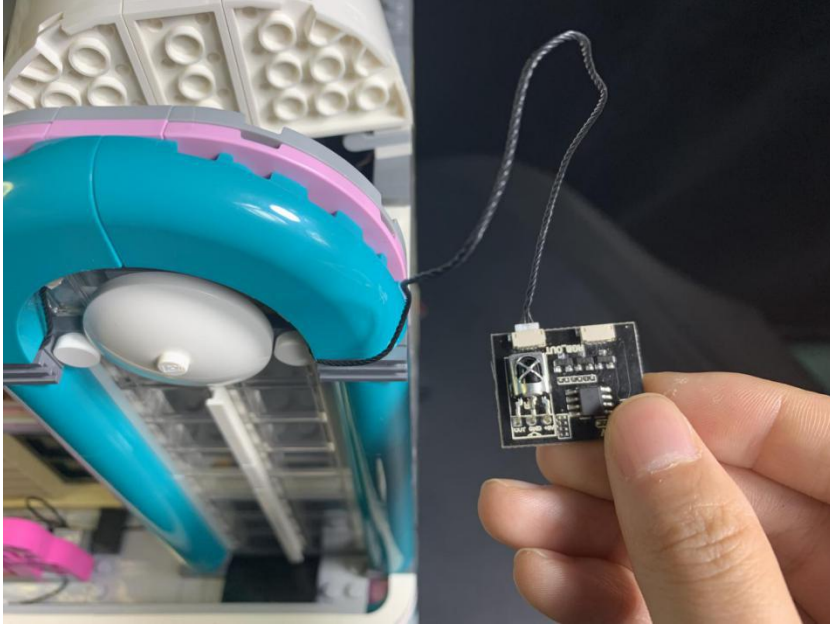
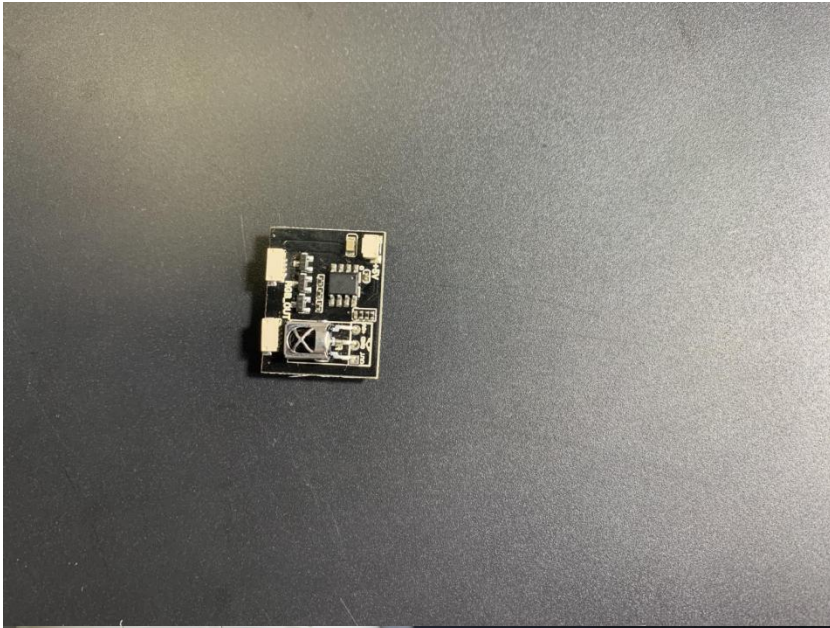
The left 30cm RGB cable is stuck in the gap of the building block, and can be pasted on the side of the wall with transparent glue.



Move 1*2 black brick block position to fix the cable and hide the cable behind the letter

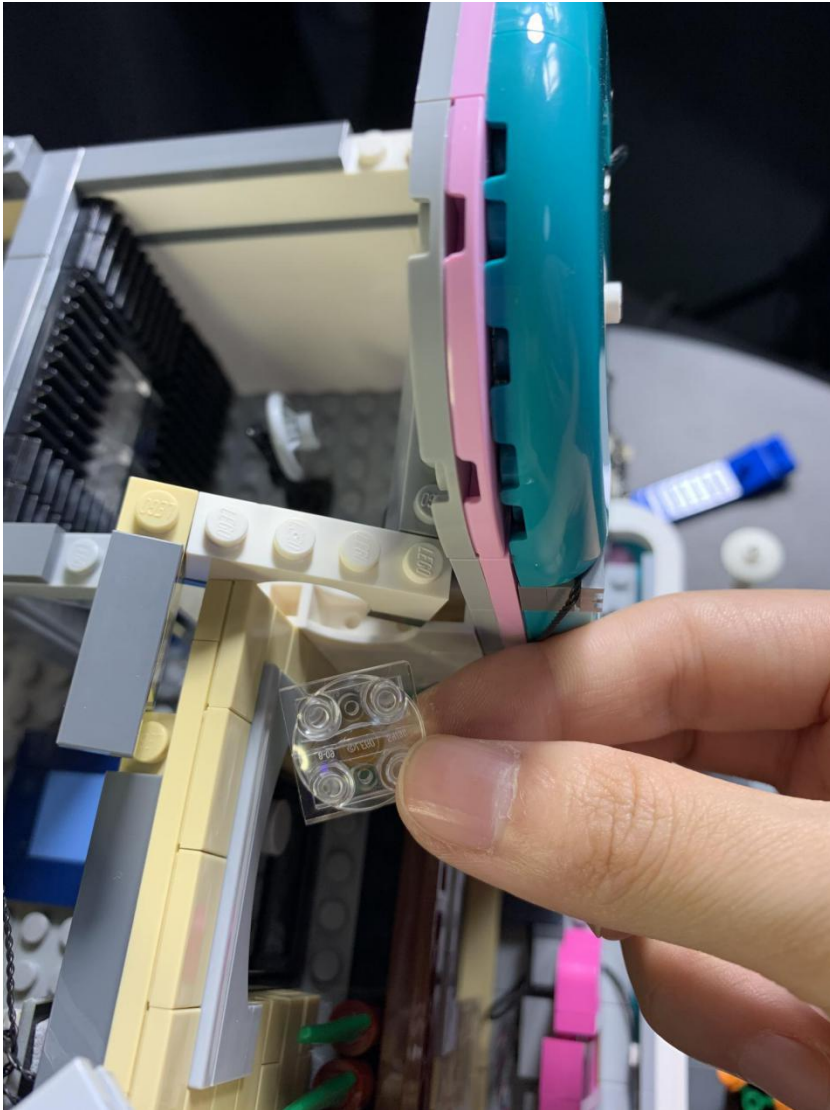


Take the RGB module and connect to the 15cm RGB cable



Remove the transparent dome from the position in the picture

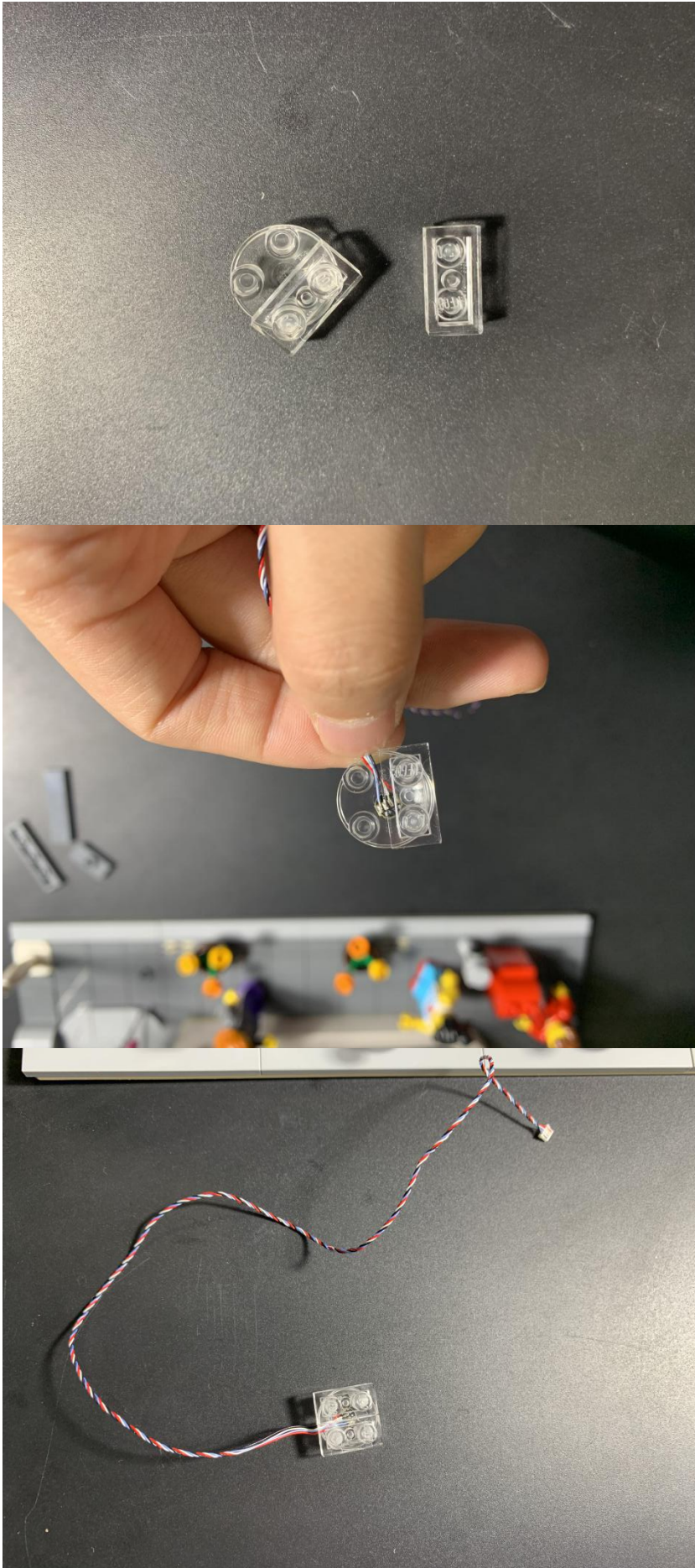




Take a RGB dot Light



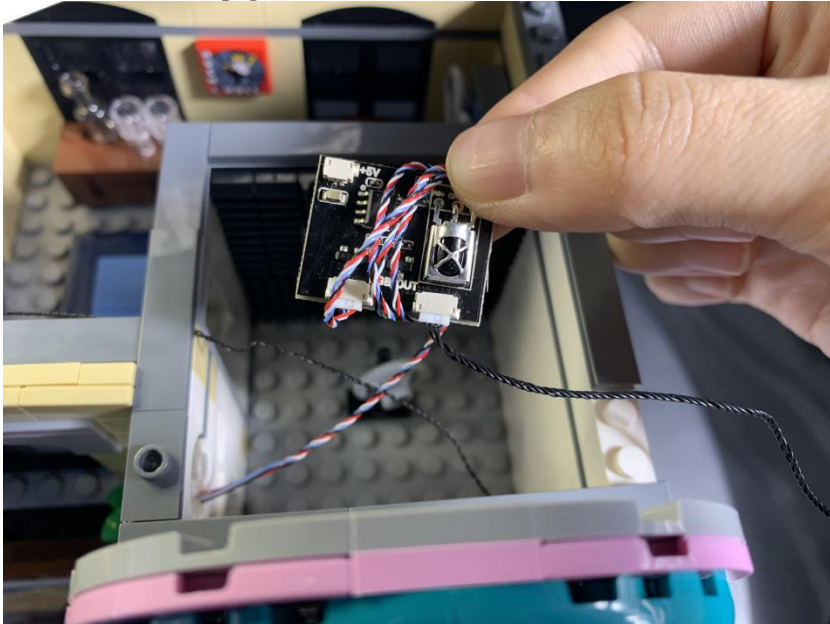
Install the lamp in the plate as shown below



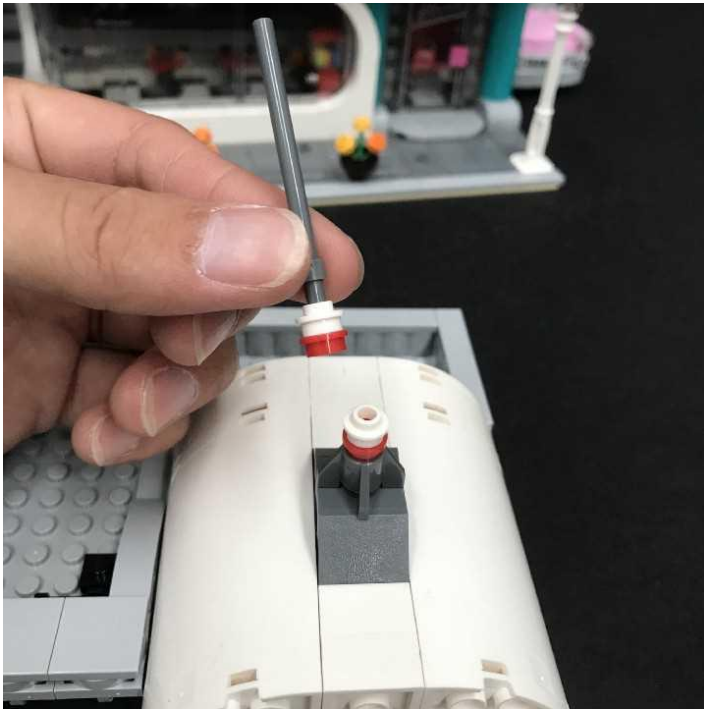
Restore dome plate and corresponding building blocks



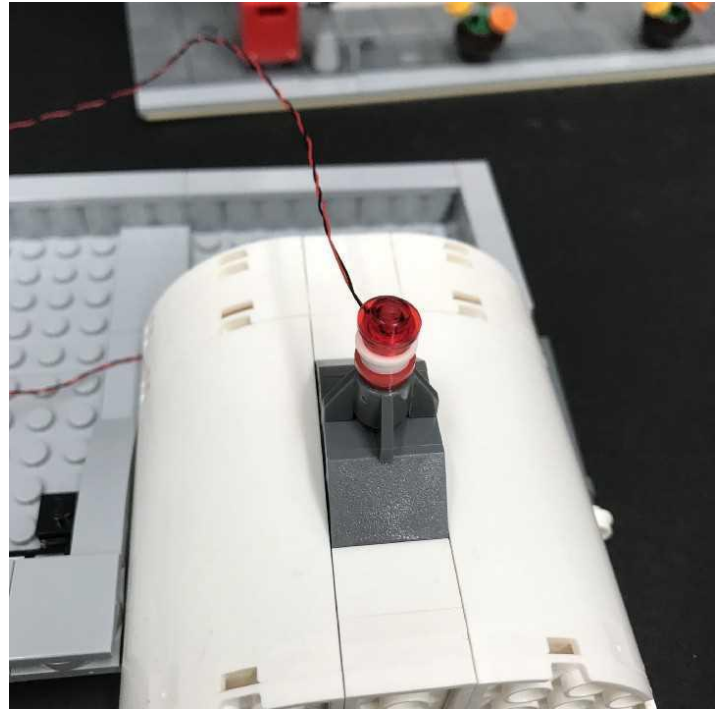
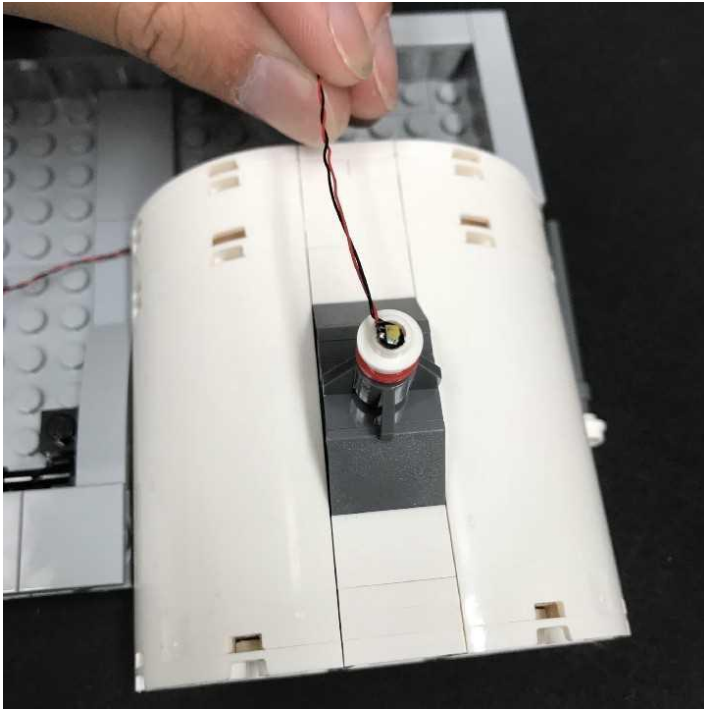
Connect the lamp grain on the module and connect it to the module RGB interface.



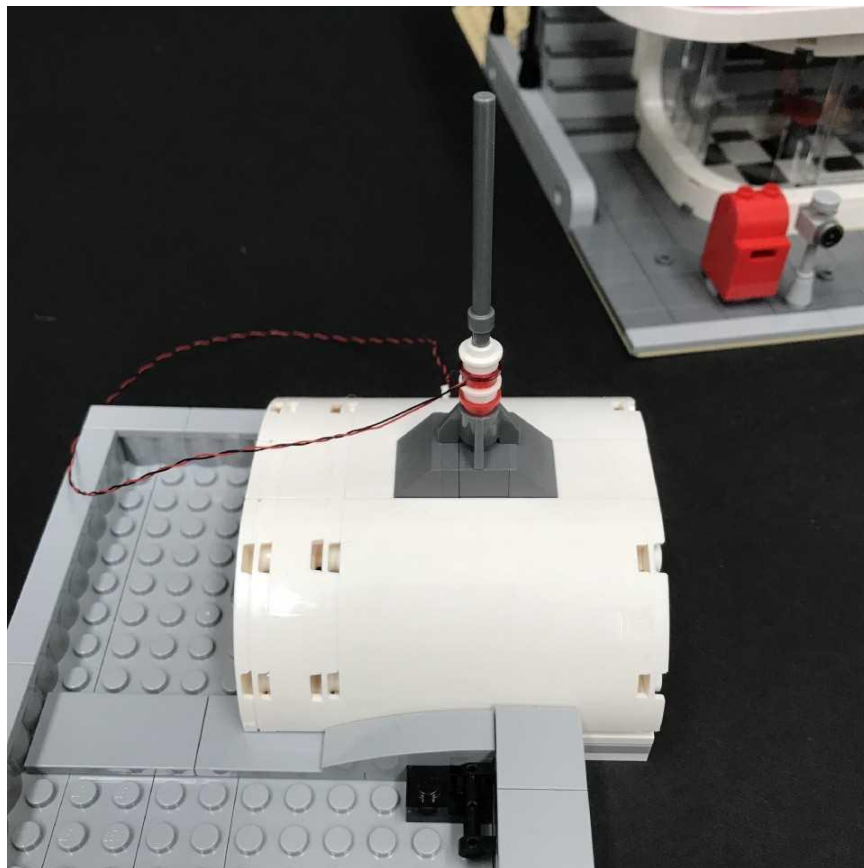
Take the roof of the building and then disconnect the antenna section at the top red round 1x1 plate. Remove the red round plate from the bottom.



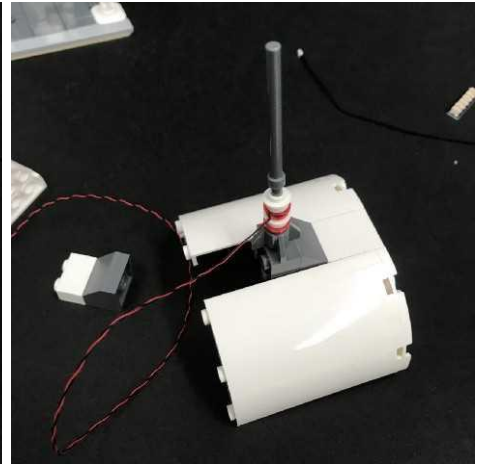
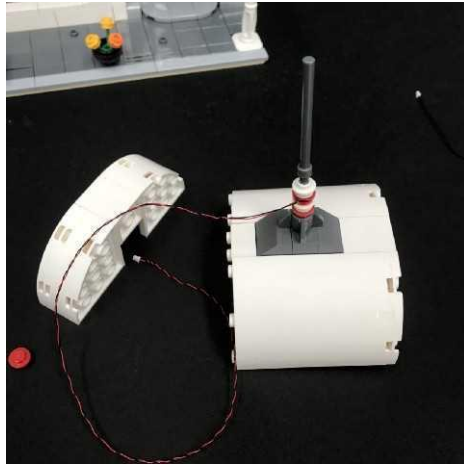
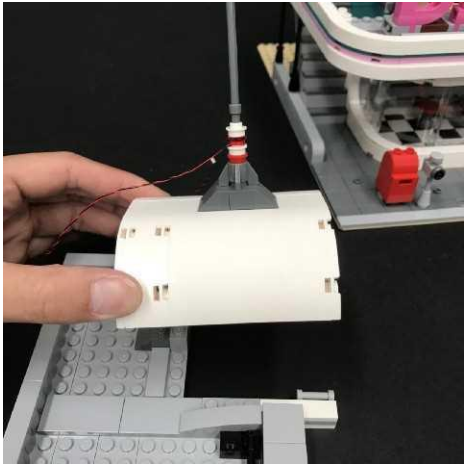
Take the remaining Flashing White 30cm dot Light and place it on top of the white round stud on the roof ensuing the cable is facing toward the back. Secure the dot Light in place by connecting a provided Trans Red round plate in lieu of the original red round plate.



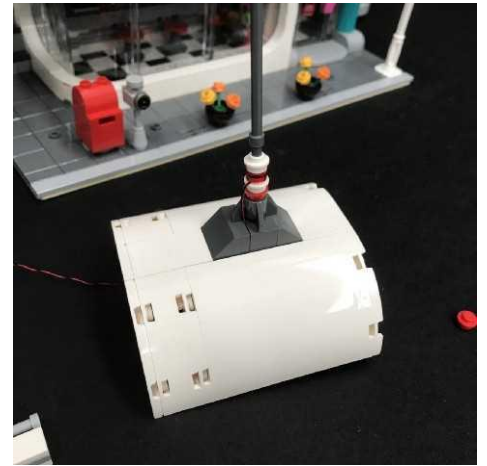
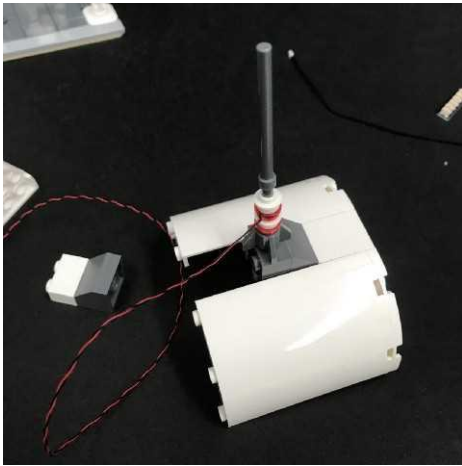
Reconnect the rest of the antenna section.



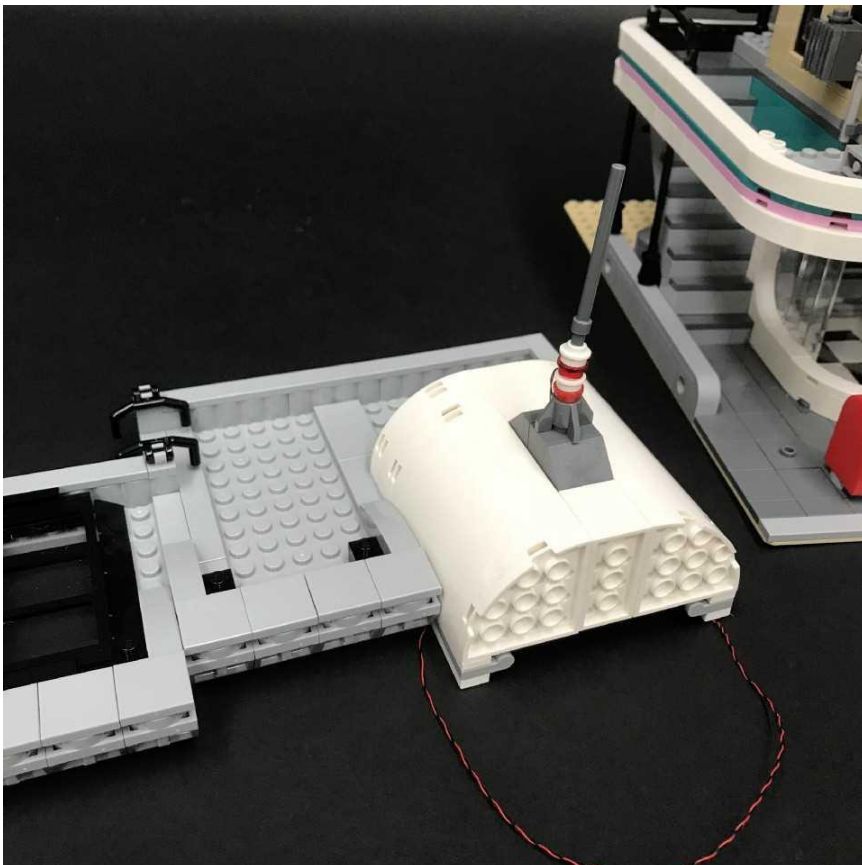
Disconnect the main white roof section and then disconnect the back sections as per below:



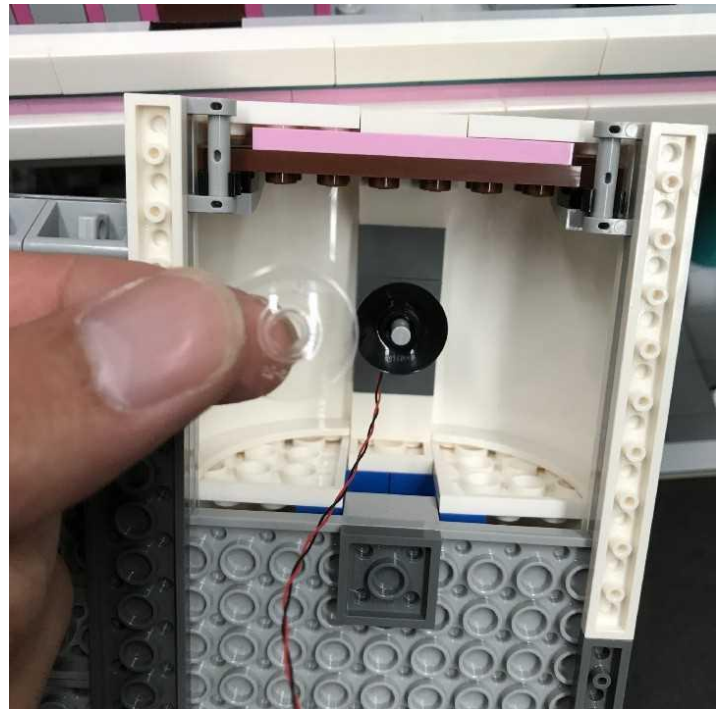
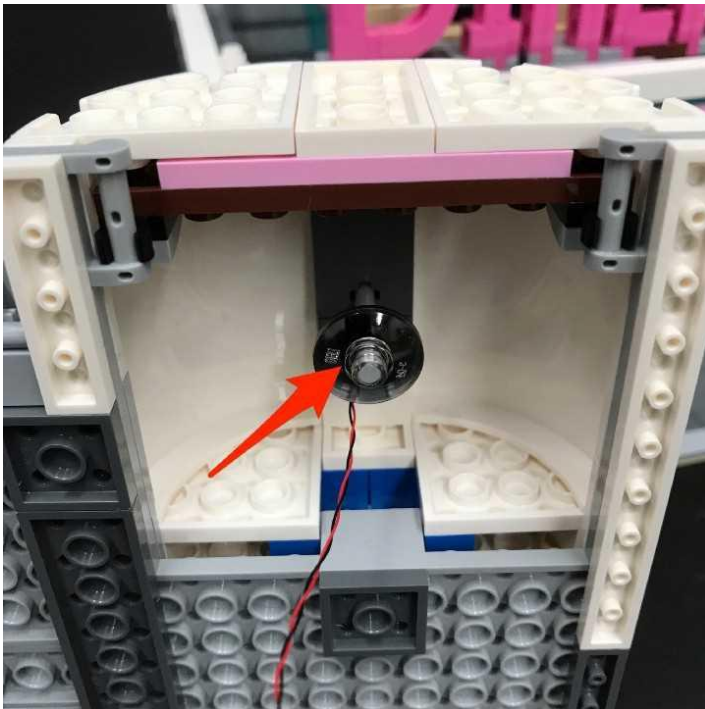
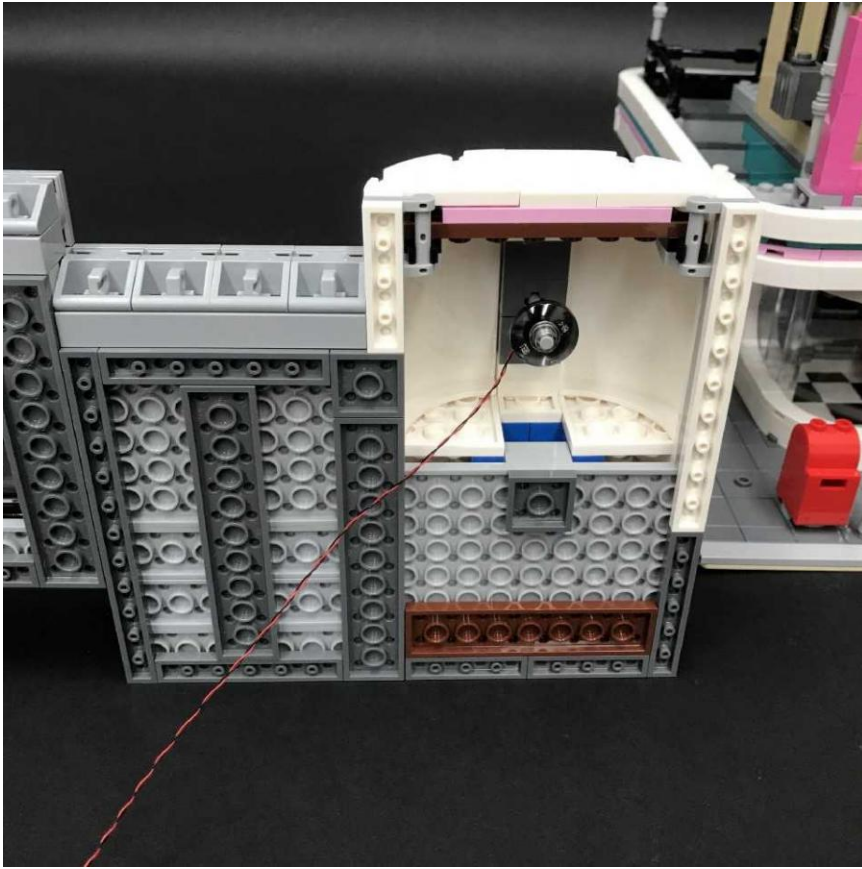
Lay the cable down in between studs and then reconnect the middle section over the top of the cable (ensuring the cable is laid in between studs). Reconnect the back section.

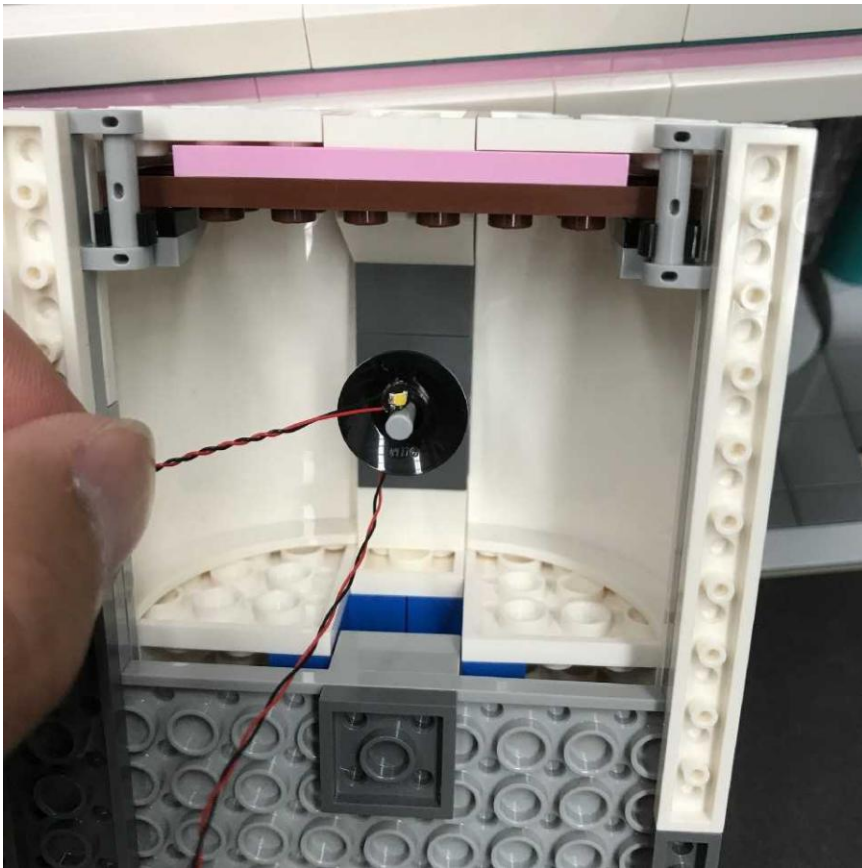
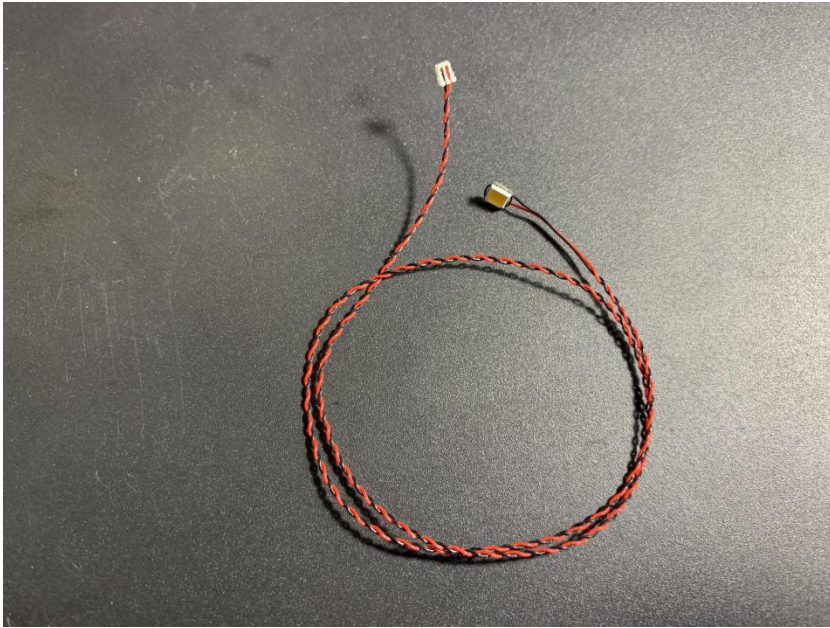


Reconnect the white roof section back to the rest of the roof.

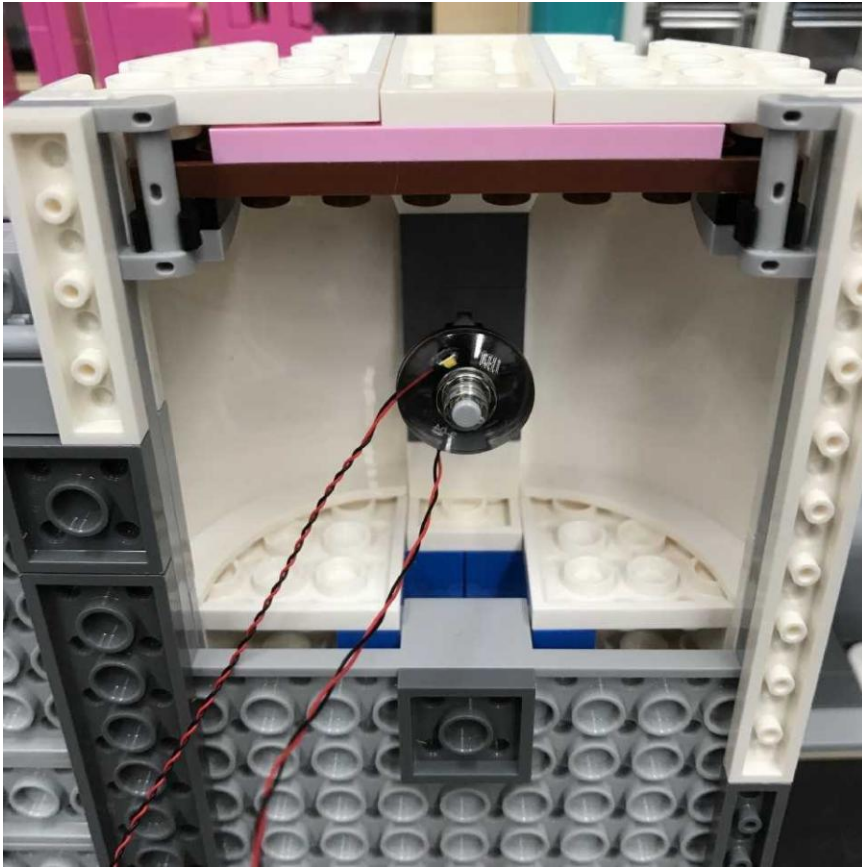


Place the roof on its back so we can access the inside. We will be installing a dot Light to light the recording studio. First disconnect the trans clear dish and then take the remaining Warm White 15cm Light and place it (facing down) at the top of the black dish.

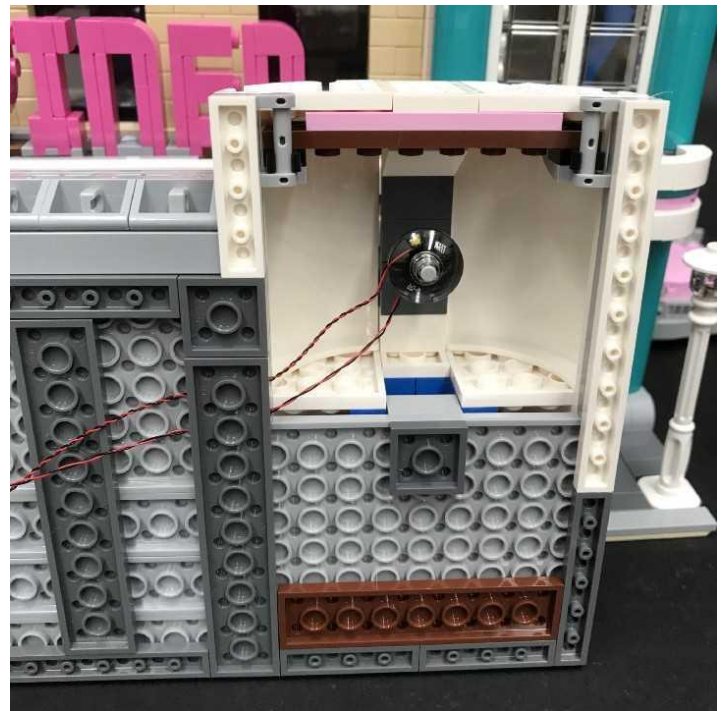
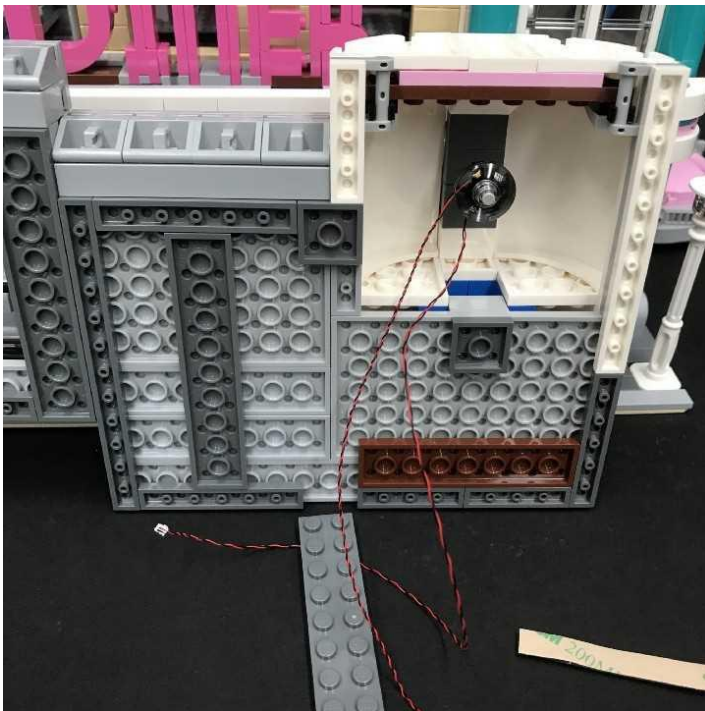




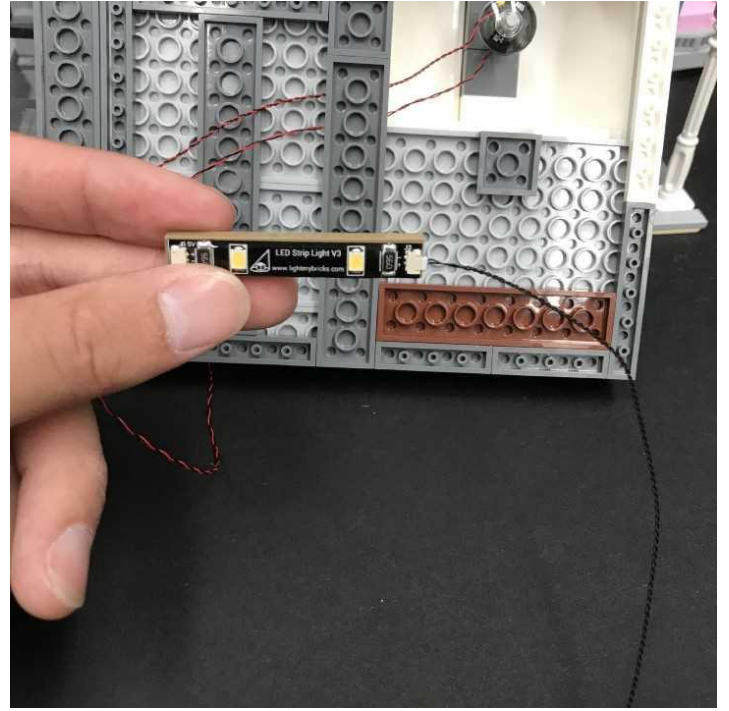
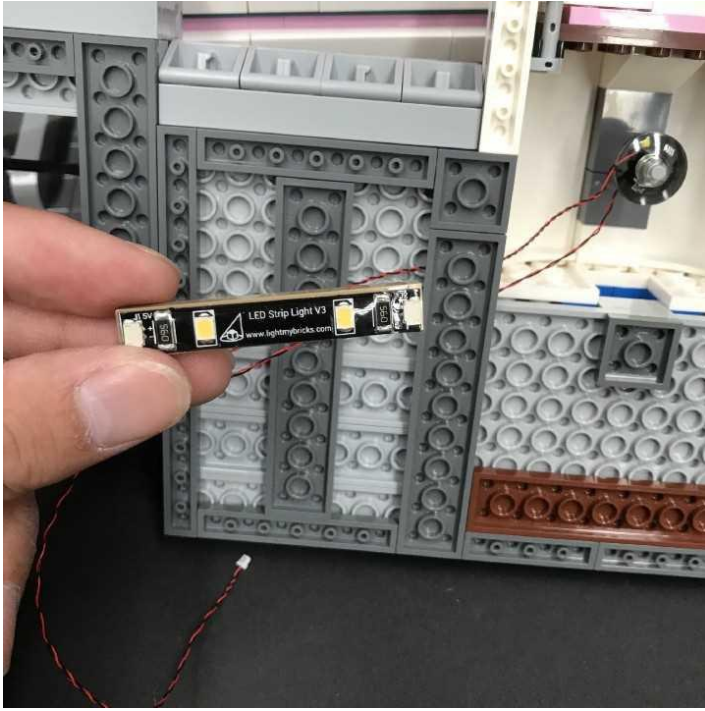
With the cable facing toward the left, reconnect the trans clear dish to secure the dot Light in place.



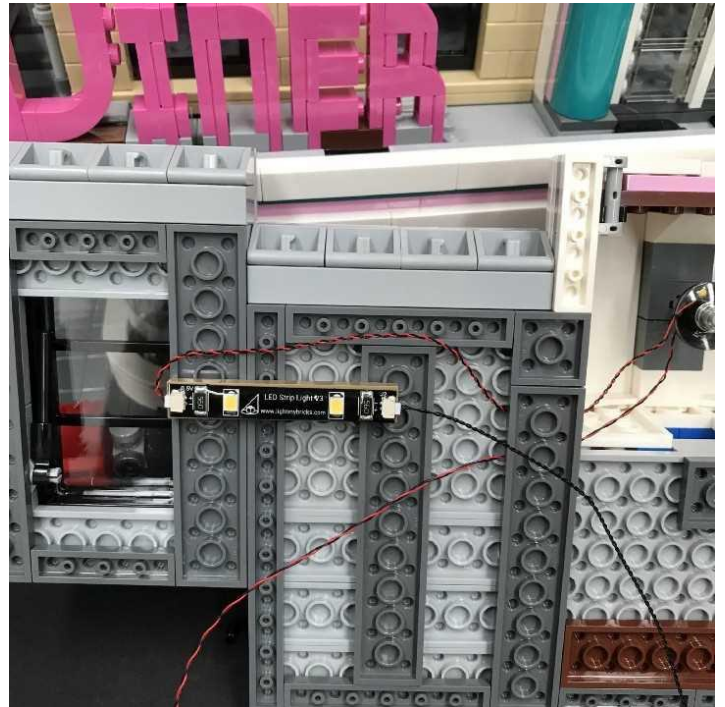
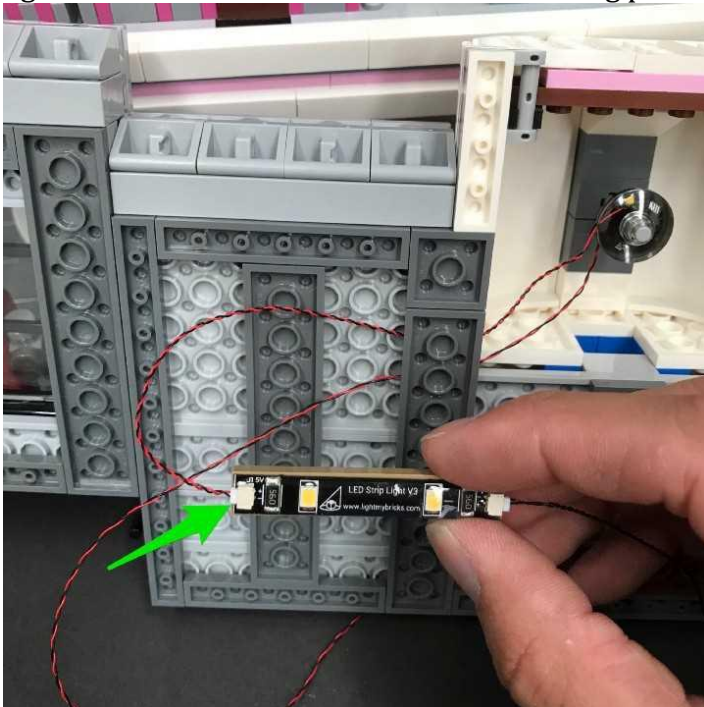
Disconnect the 2x10 dark grey plate and then lay the two dot Light cables toward the left. Reconnect the 2x10 plate over the top ensuring each cable is laid in between studs.



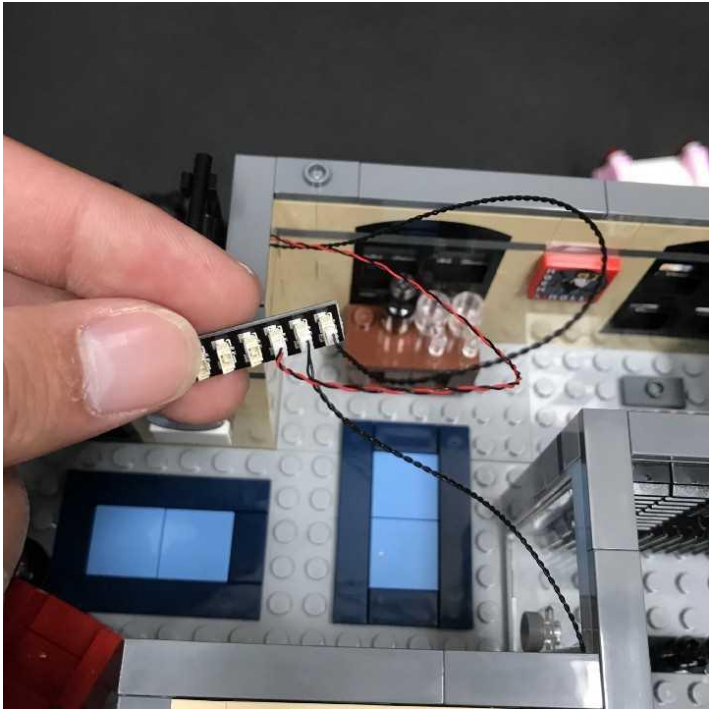
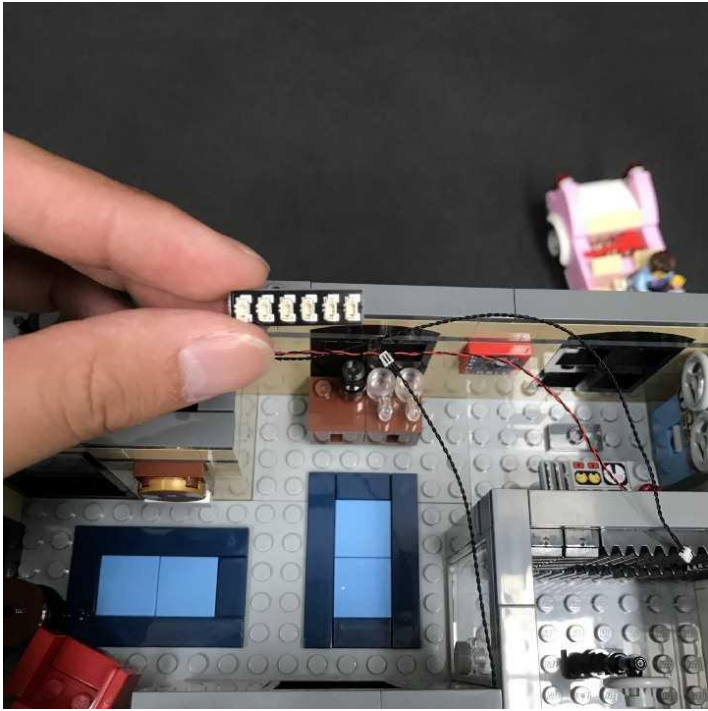
Take the remaining White Strip Light and stick it to the remaining LEGO plate 1x6. Connect the last 15cm Connecting Cable to the right port on the strip light.



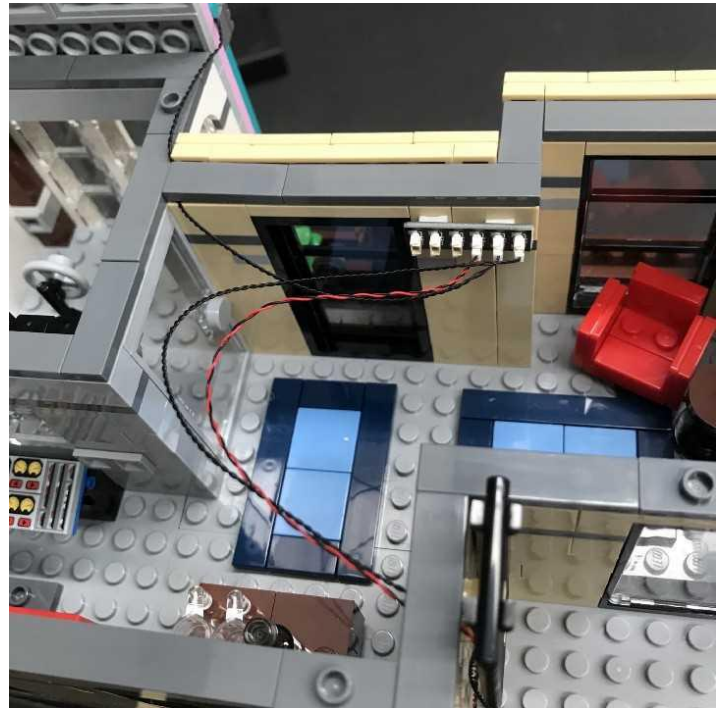
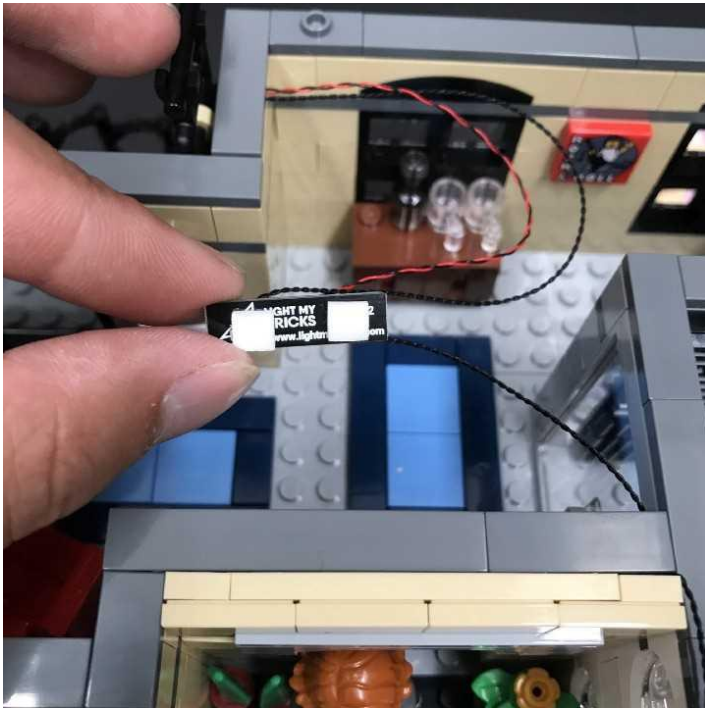
Connect the other end of the White 15cm dot Light to the left port on the strip light and then mount the strip light to the bottom of the roof in the following position:



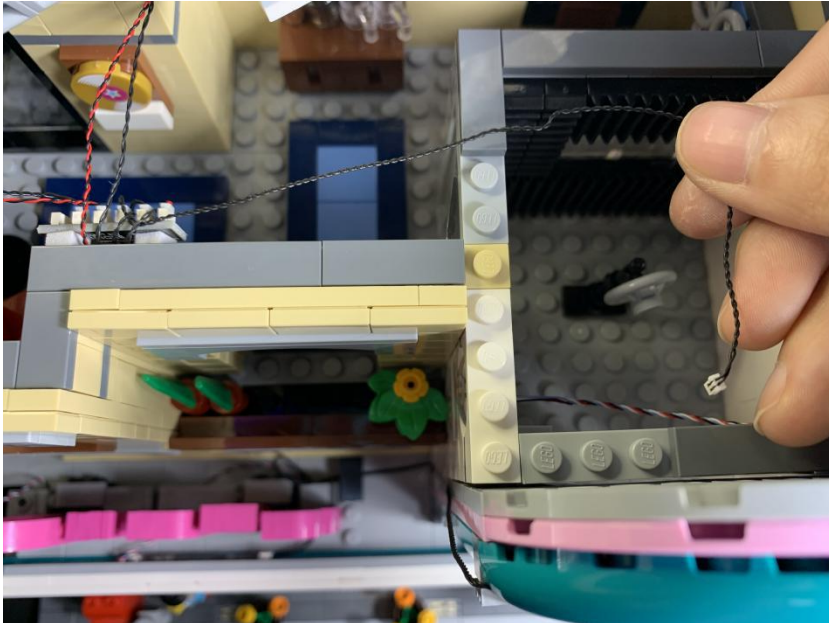
Take the 6-port Expansion Board and then to the spare ports, the connect the 30cm connecting cable from the third koor, the lamp post cable from second koor, and the 15cm connecting cable from the strip light on the front arc.

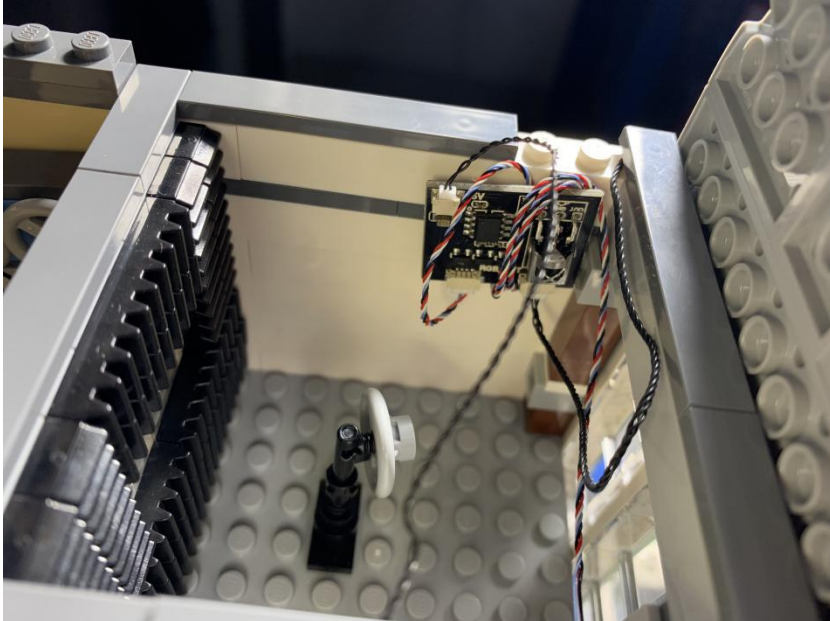
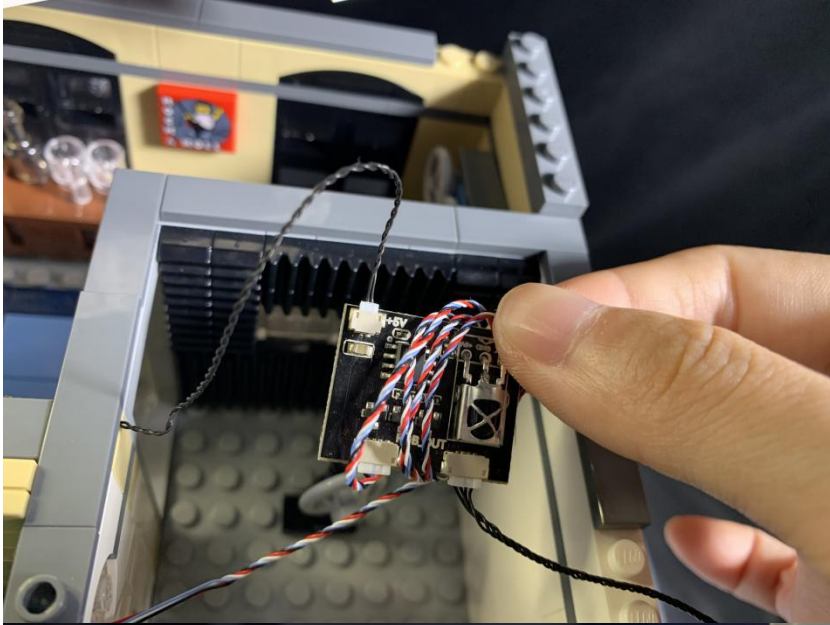
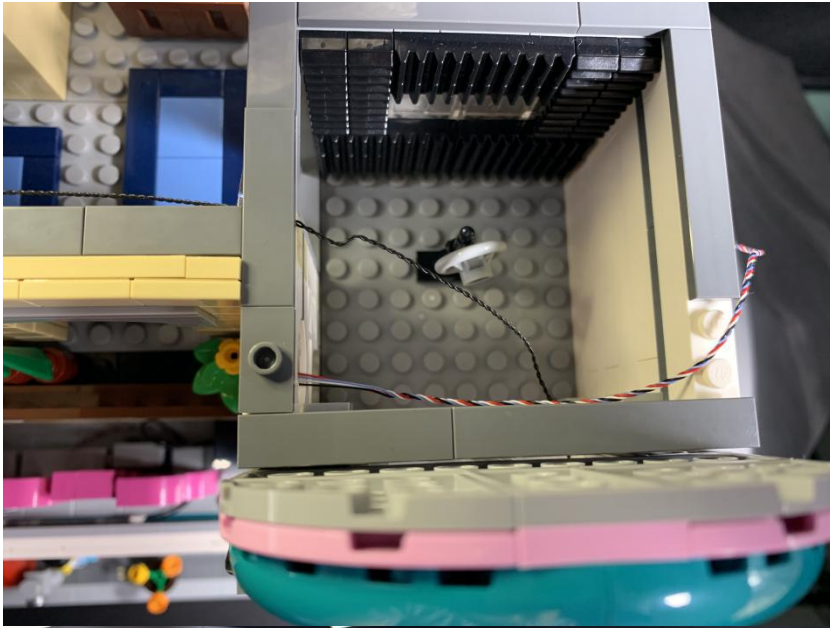


Mount the strip light to the inside of the building in the following position using the remaining 2x Adhesive Squares.

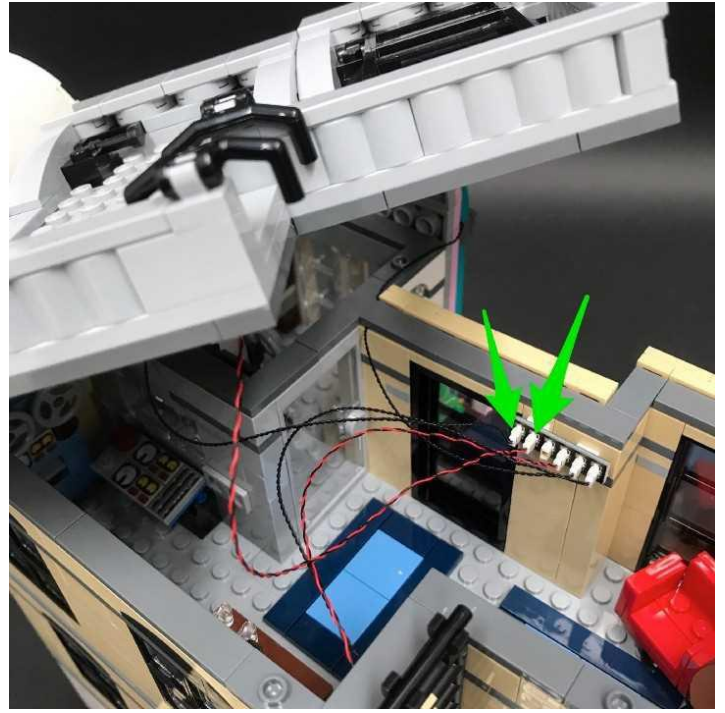


Take a 15cm cable and connect it to the 6-seat socket. Connect the other end to the connector on the RGB module. Press the cable under the base board and fix the module to the side wall with Adhesive Squares.





Take the roof directly above the building and then connect the Flashing White 30cm dot Light cable as well as the 15cm Connecting cable from the strip light to the spare ports on the 6-port expansion board.



Securely reconnect the roof to the third floor.



This finally completes installation of the Downtown Diner Lighting Kit. Turn on the switch, and control the color and blink mode of the RGB light through the remote control. Turn on your light kit and ENJOY!

