Ghostbusters_Firehouse_Headquarters_75827 LED Lighting Kit

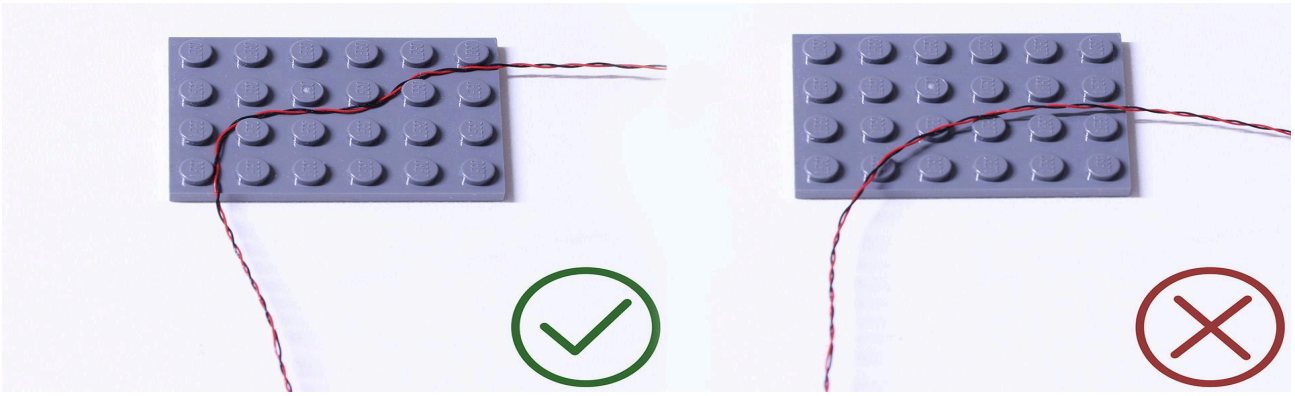
Package contents:

- 6x LED Strip Lights
- 13x White 30 cm Dot Lights
- 3x Flashing Red 30cm Dot Lights
- 1x Flashing White 30cm Dot Light
- 1x 12-port Expansion Board
- 2x 6-port Expansion Boards
- 1x 4-port Traffic Light Effects Board
- 1x Battery Pack (3x AA batteries not included)
- 10x Adhesive squares
-
- **Connecting Cables**
- 4x 15cm cable
- 5x 30cm cable
-
- **Extra Pieces**
- 6x plate 1x6 (for mounting strip lights)
- 2x trans red 1x1 round plate
- 1x trans green 1x1 round plate
- 1x trans orange 1x1 round plate
- 2x trans red 1x1 round brick
- 2x light grey 1x1 modified brick with stud on one side
- 2x light grey “tap”

Note:

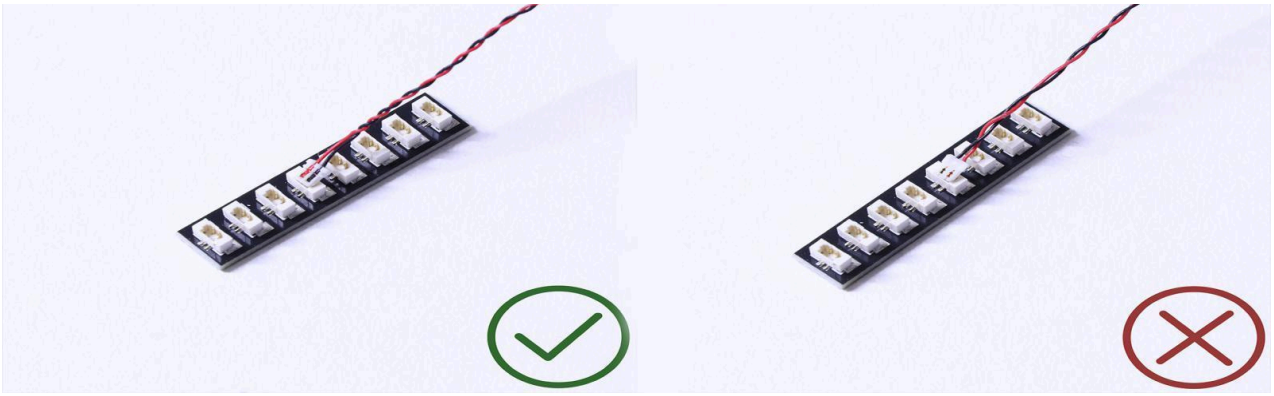
Place wires on the surface or under the building blocks.

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

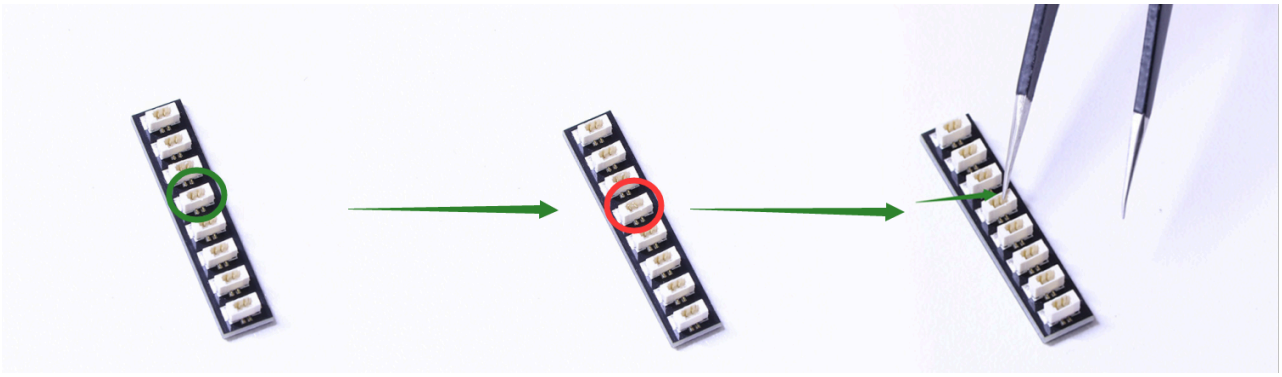


Insert the connectors to the ports.

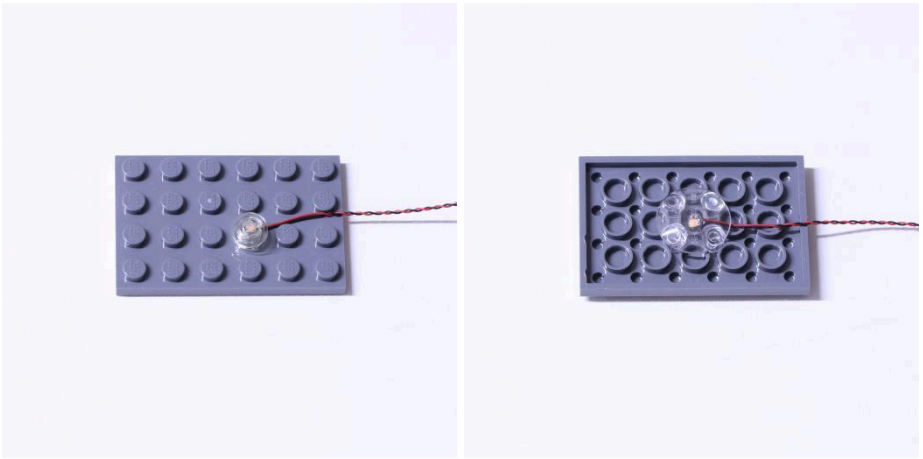
Be careful when you are operating, there’s only one correct way to insert, make sure the expansion board is upward, find the soldered “=” sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the “=” sign and if you feel hard to insert, please stop,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



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

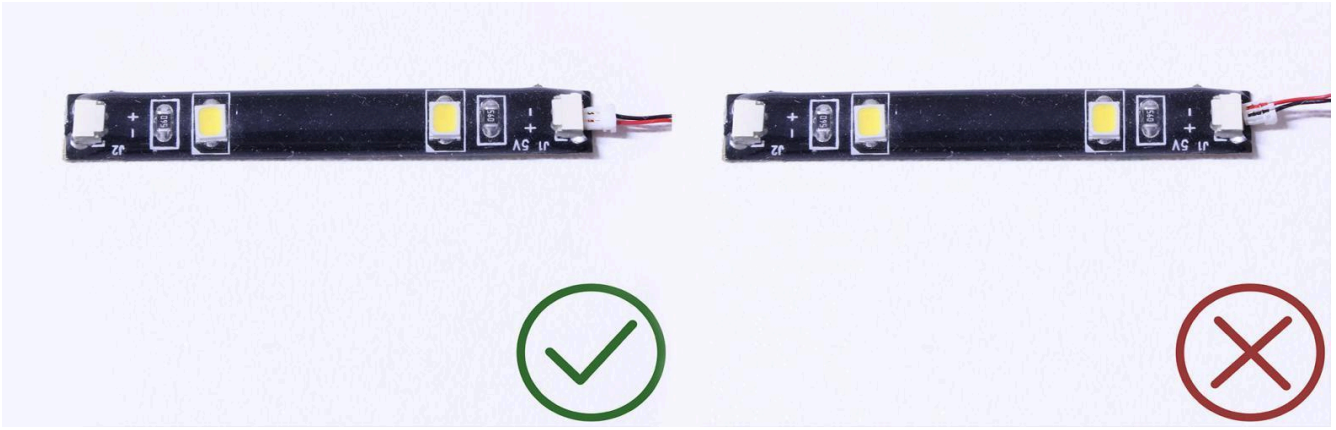


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put they either on the top of the studs or between studs.



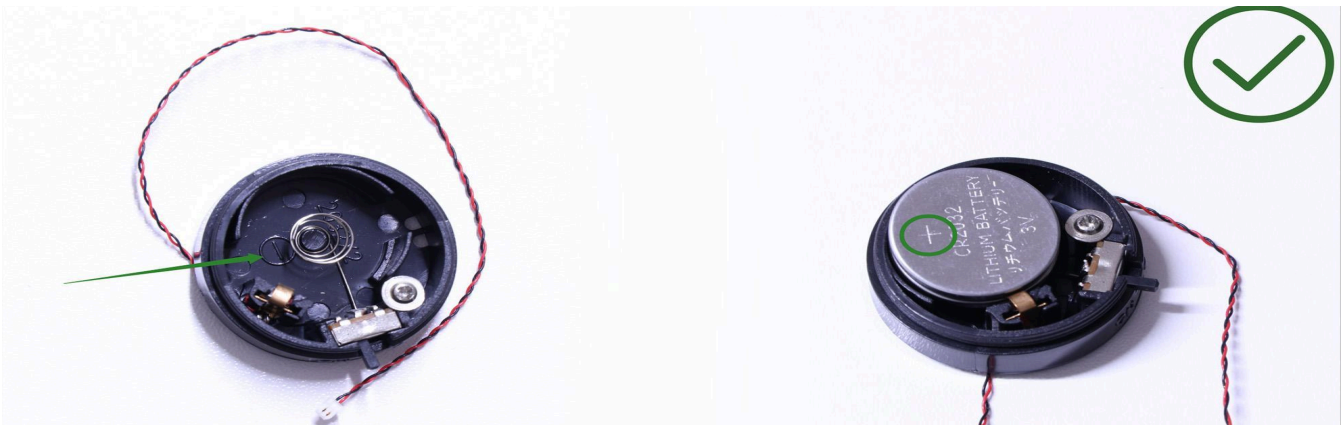
Connecting cable connectors to Strip Lights

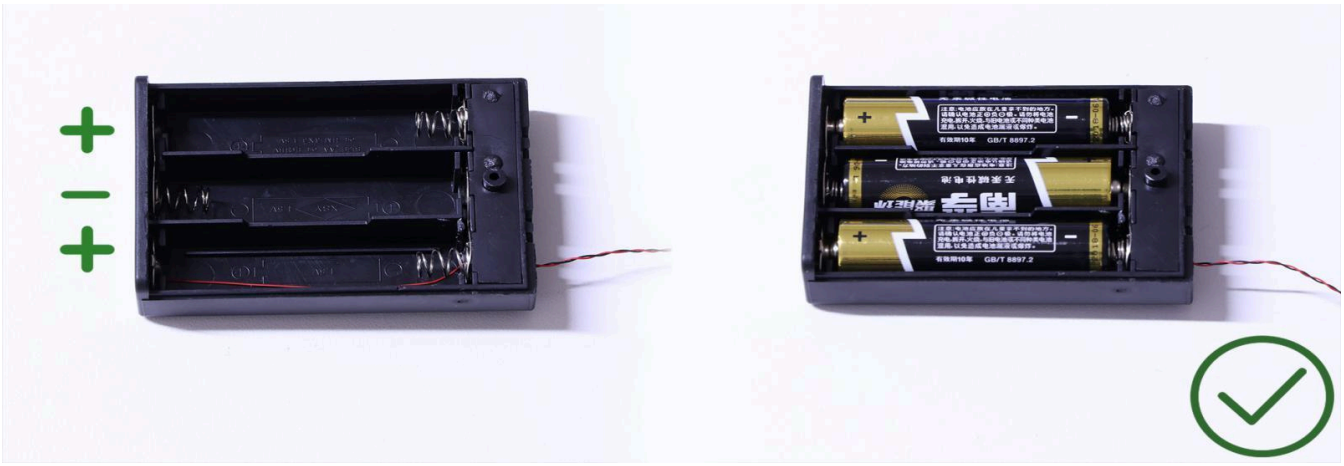
Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage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



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







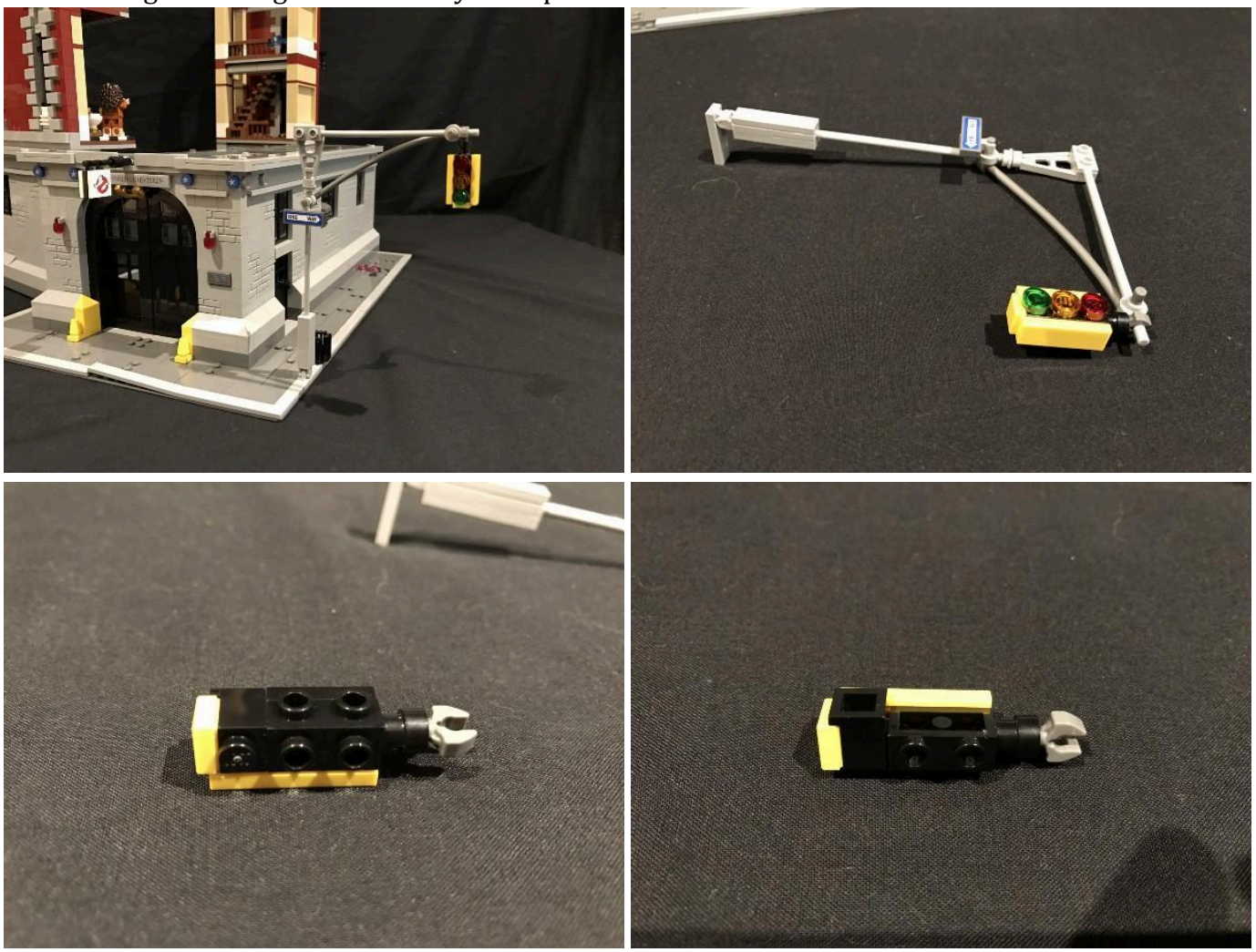
OK, Let's Begin!

Instructions for installing this kit

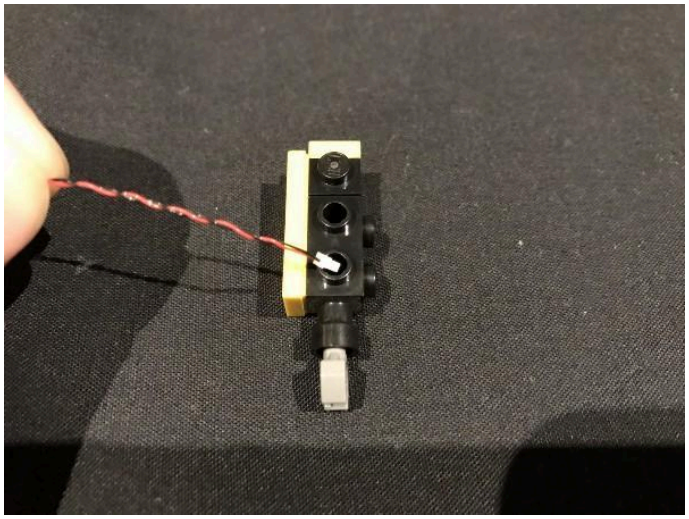
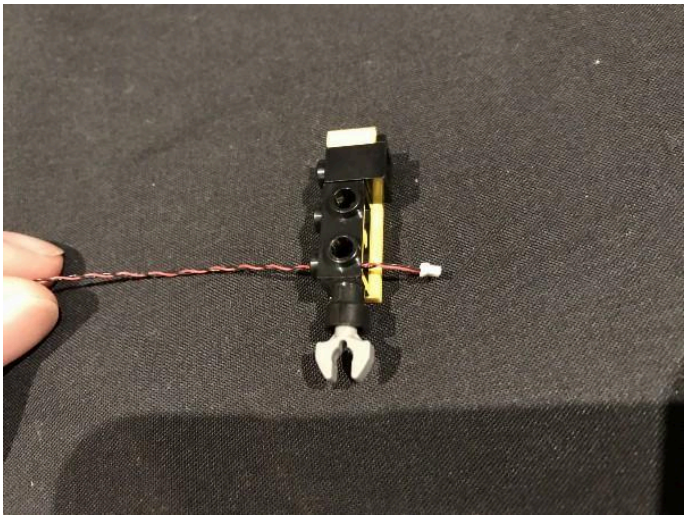
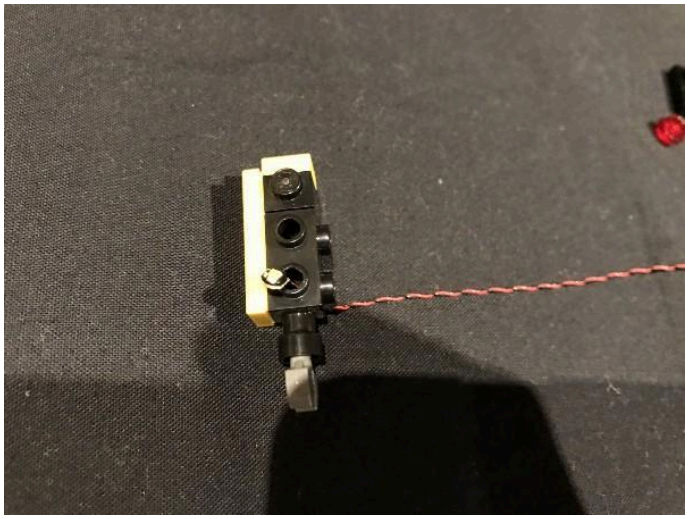
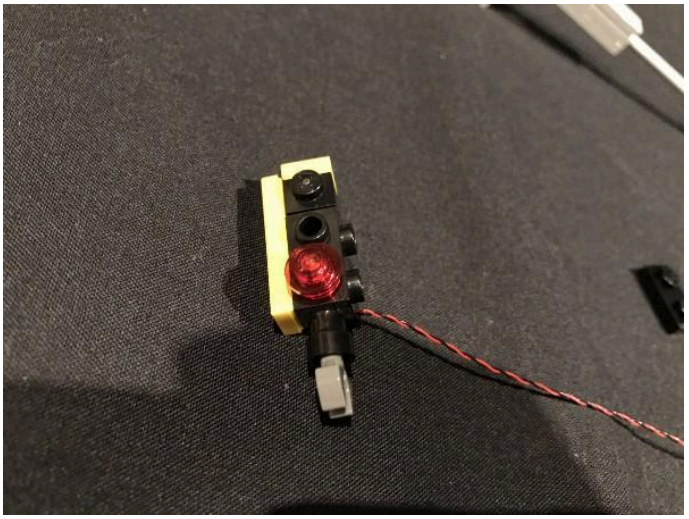
1.) This lighting kit is installed from the bottom up. Start by opening the building and removing the 2nd and top levels of the modular building.



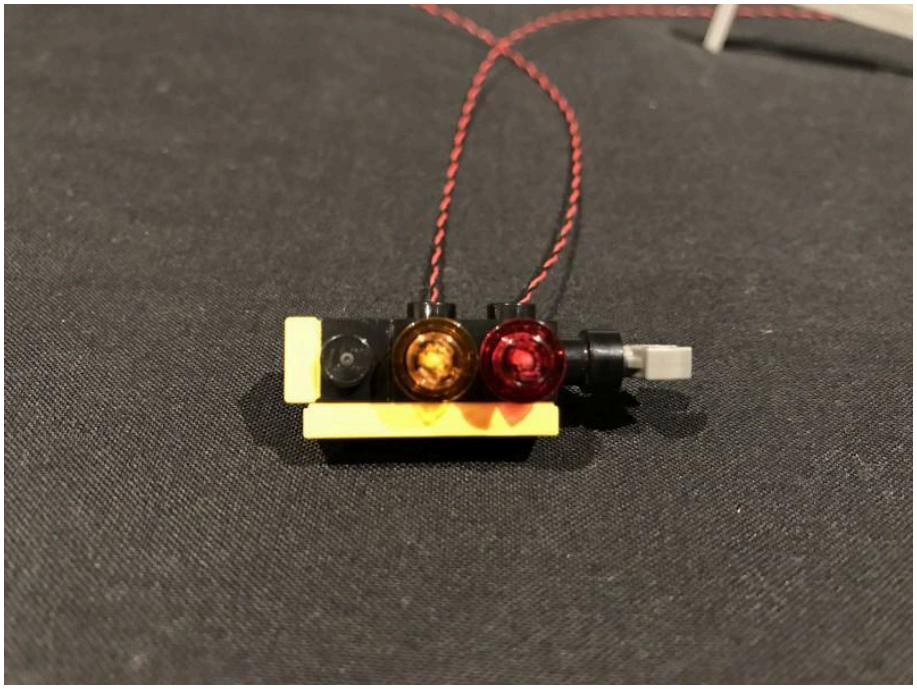
We will be installing lights to the traffic light first. Remove the traffic light and pole, then disassemble the traffic light starting from the left yellow plate.



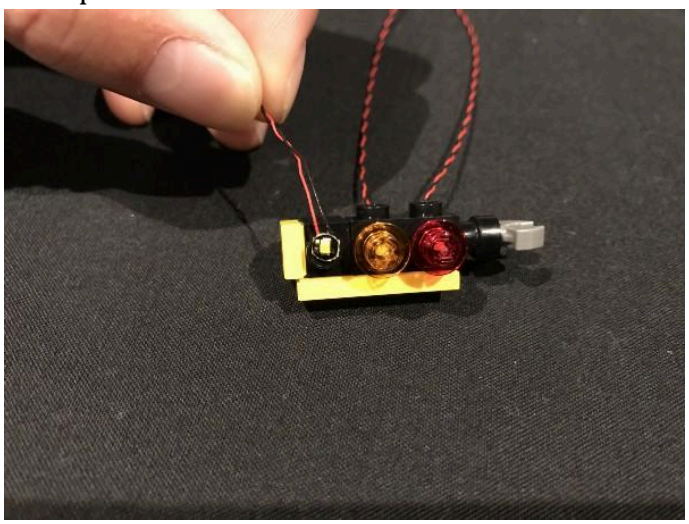
2.) Take 1 Dot Light and thread the connector side through the first hole on the side of the black traffic light piece as shown below. Pull the Dot Light all the way through from the base of the traffic light piece until the LED is at the top of the hole, then secure it in place by connecting one of the provided red trans round plates over the top. Ensure the LED component is facing the correct way up before securing.

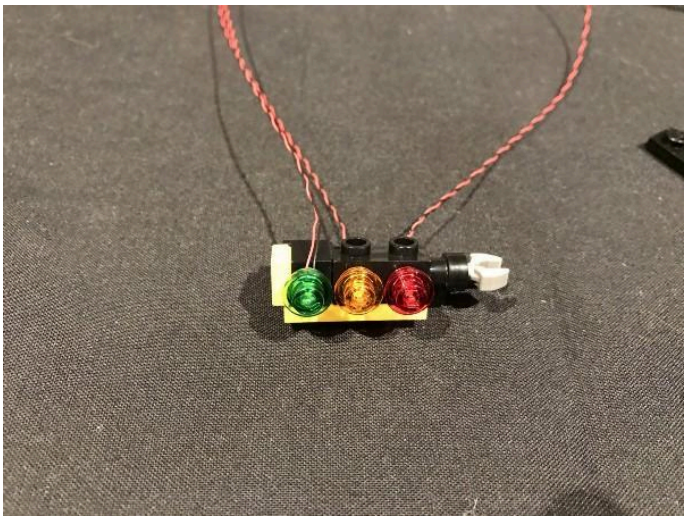





Repeat this step to install another Dot Light to the next hole on the traffic light piece this time, using the provided orange trans round plate to secure the Dot Light.



3.) To install the green light, take another Dot Light and then place it directly over the stud with the LED facing up. Then secure it in place by connecting the provided green trans round plate directly over the top.





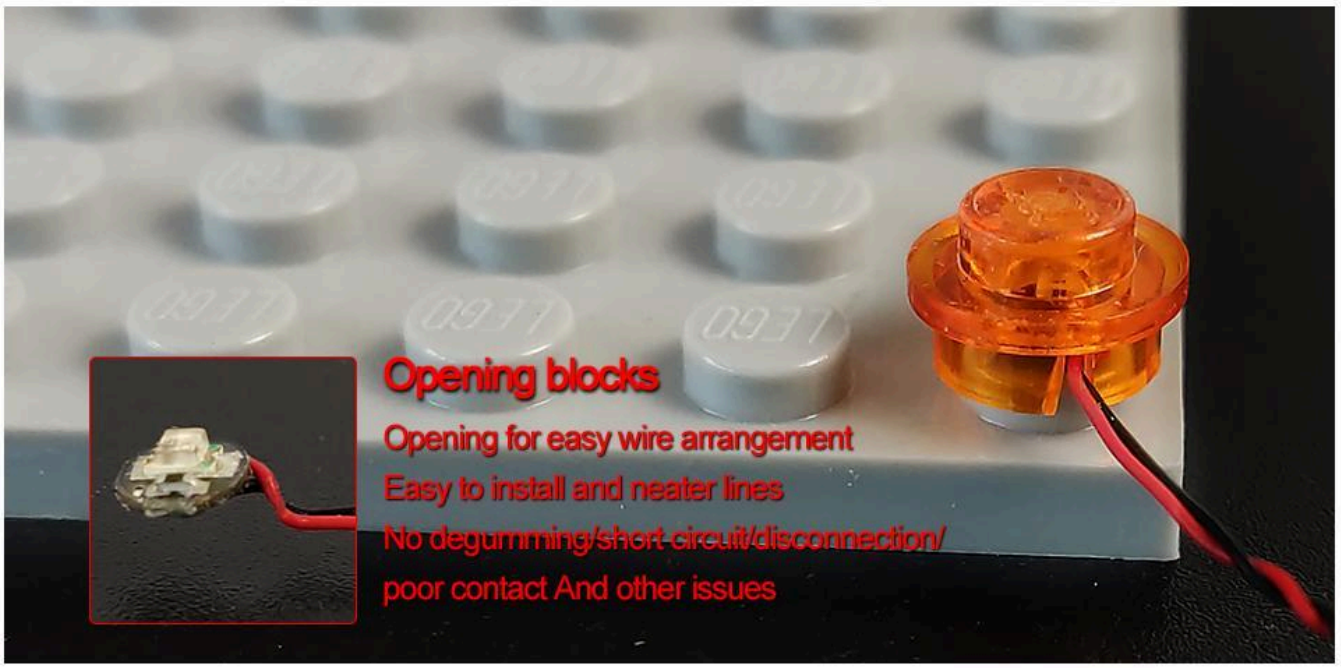
Friendly tips

The small round pellets in the parts package are designed with openings. After manual processing, the cut-out gap is about 1mm wide and 2mm deep.

No opening:

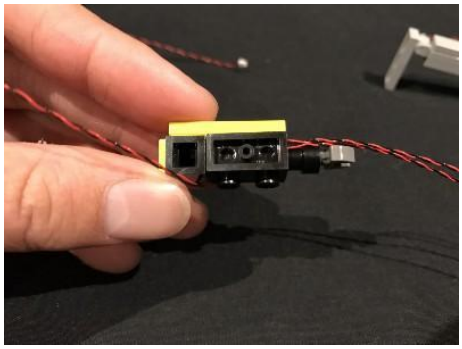
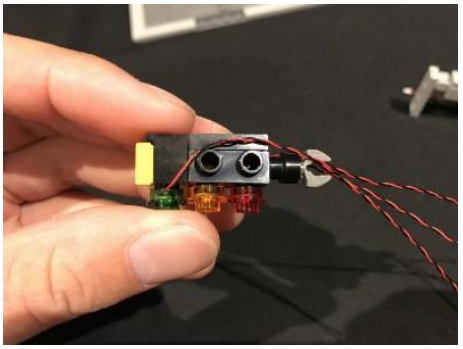
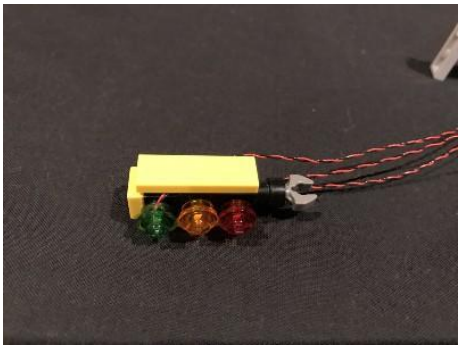


Opening pieces:

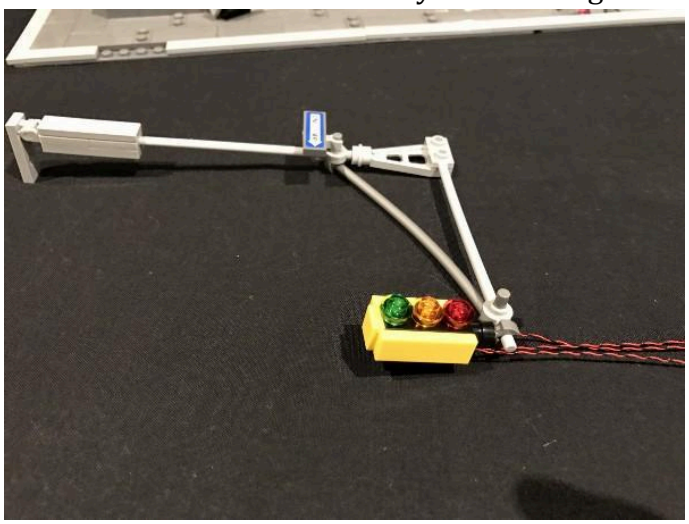
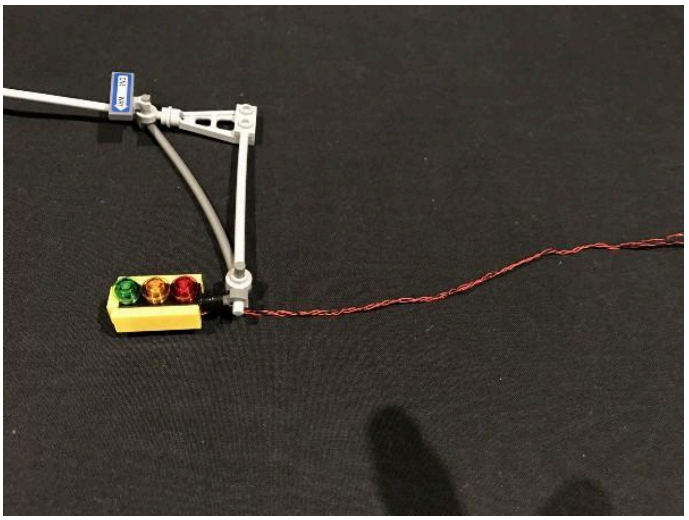


Need to install the lamp thread through the gap on the building block.

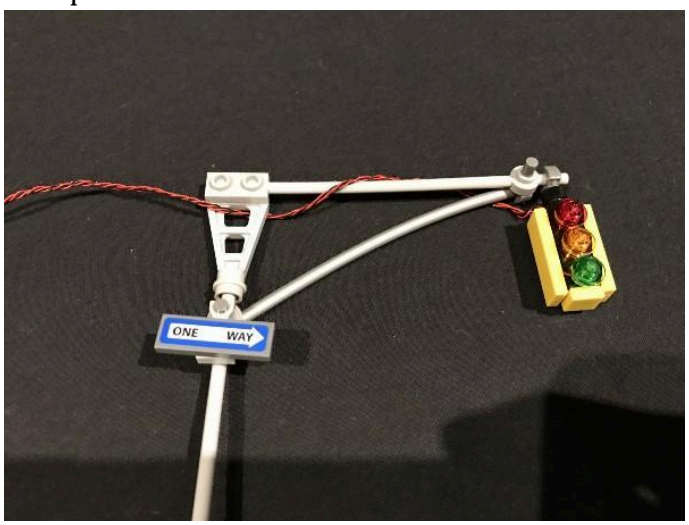
4.) Reconnect the black 1x2 plate we removed earlier as well as the yellow 1x3 tile ensuring the cables are laid in between and underneath the pieces.

5.) Reconnect the traffic light with lights installed to the pole and then take the 3 cables and wind them around each other so they all come together as one thick cable.

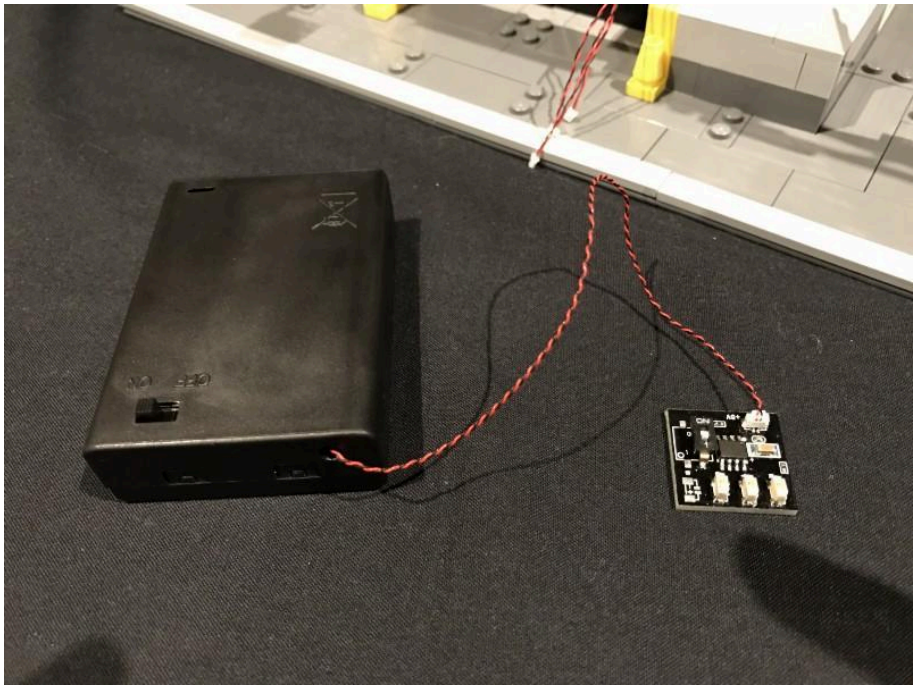



Thread the cable around the top of the pole as shown below before reconnecting the pole back to the base plate.



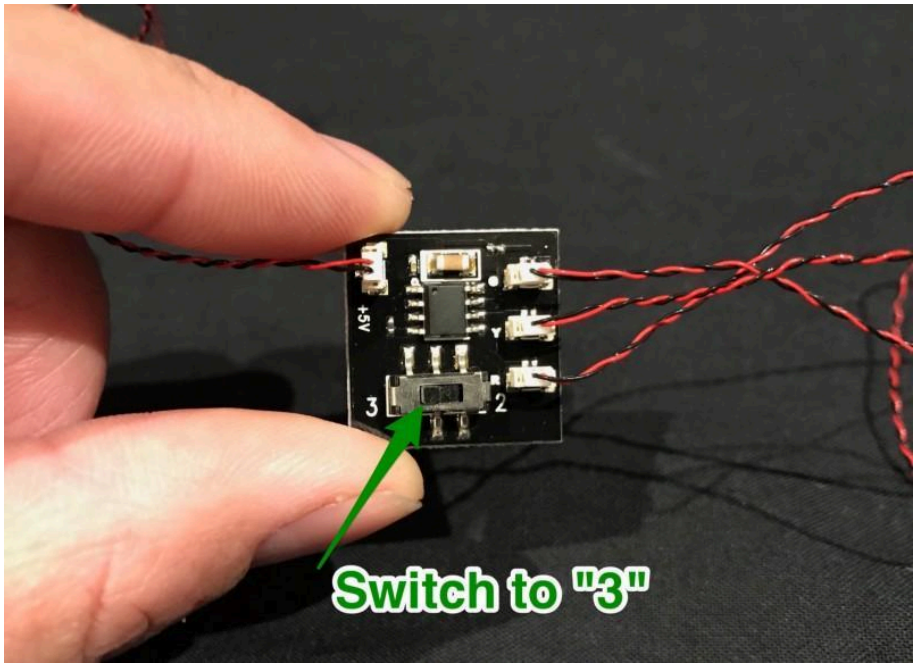


6.) Take the battery pack and insert 3x AA batteries to it. Connect the battery cable into the top port of the 4-port traffic light board as shown below.



Ensure the effect switch is at the label “3”. (The other option “2” is for a 2-light traffic lights effect which we don’t for this)

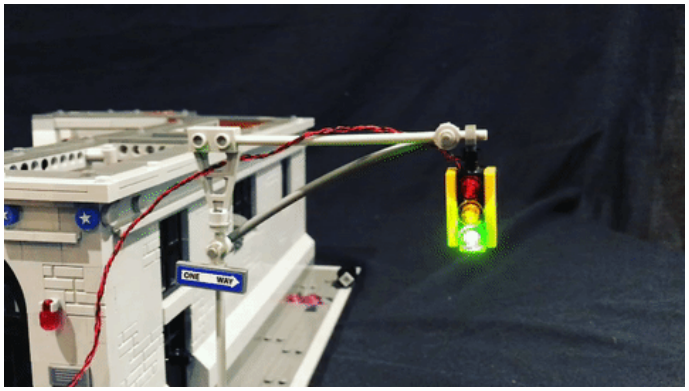
Connect the 3 cables from the traffic light into the ports on the traffic light board labelled “G”, “Y” and “R”.



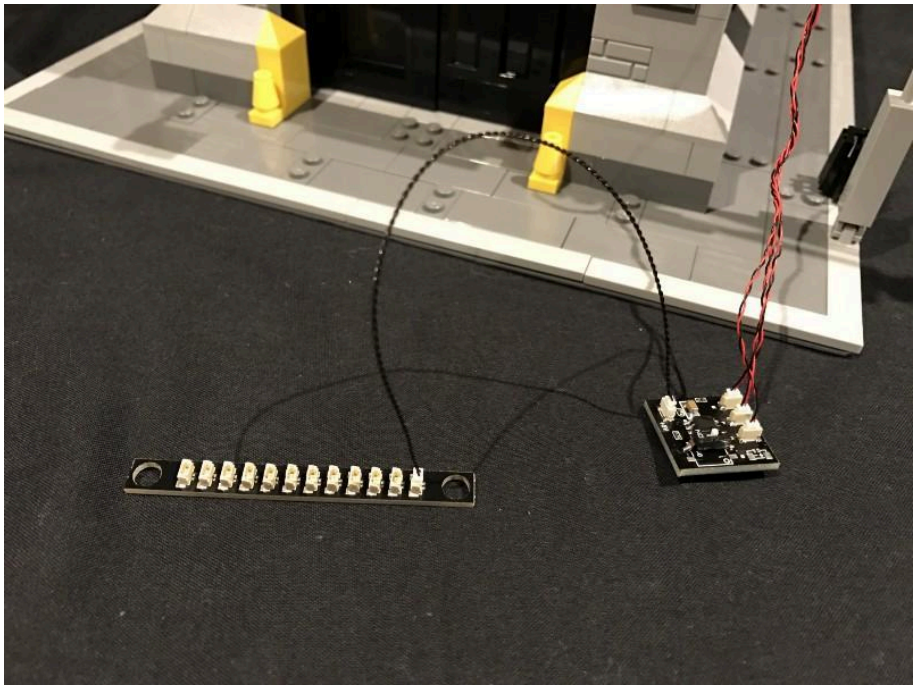
At this point you may be thinking, “Great, I’ve just mixed up my 3 cables, how am I meant to know which cable is for which port?”

The only way is to turn on the battery pack and seeing which light comes on for which port we connect to. We will need to ensure that each light is connected to the correct port otherwise the effect sequence will not be accurate. E.G if you connect a light into the port “G” but you notice the yellow light is on at the traffic light, then remove this light and connect it to port “Y”.

The effect sequence should go Green for 5 seconds, flash 3 times, Yellow for 3 seconds, flash 3 times, Red for 5 seconds, flash 3 times, Repeat.

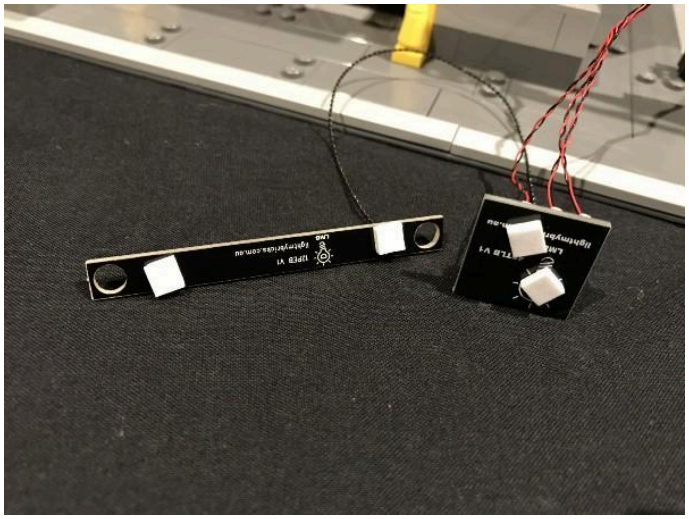


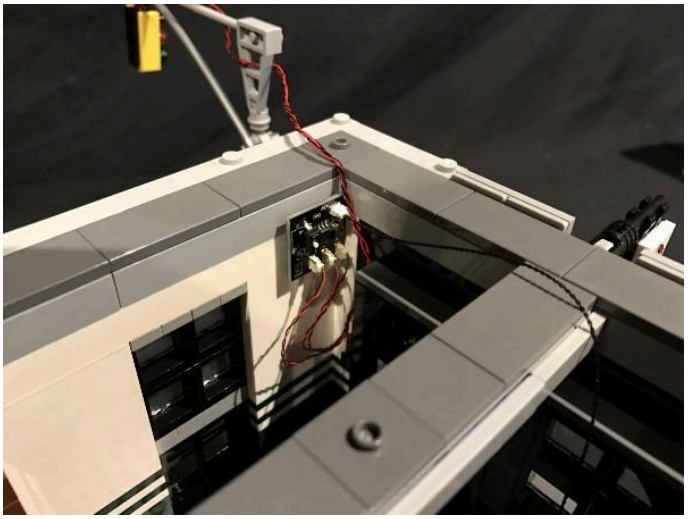
7.) We can now remove the battery pack cable from the top traffic light board (as we only connected this to test the traffic light board). Replace this with a 15cm connecting cable, then connect the other end to the first port on the 12-port expansion board



Take 4x adhesive squares and stick 2 to each board. Mount the traffic light board to the inside of the building in the top right corner. Hide the excess cables from the traffic light underneath the board.

Leave the expansion board for now as we will mount this later.





8.) We will now move onto installing lights to the front of the building. Start by disconnecting pieces

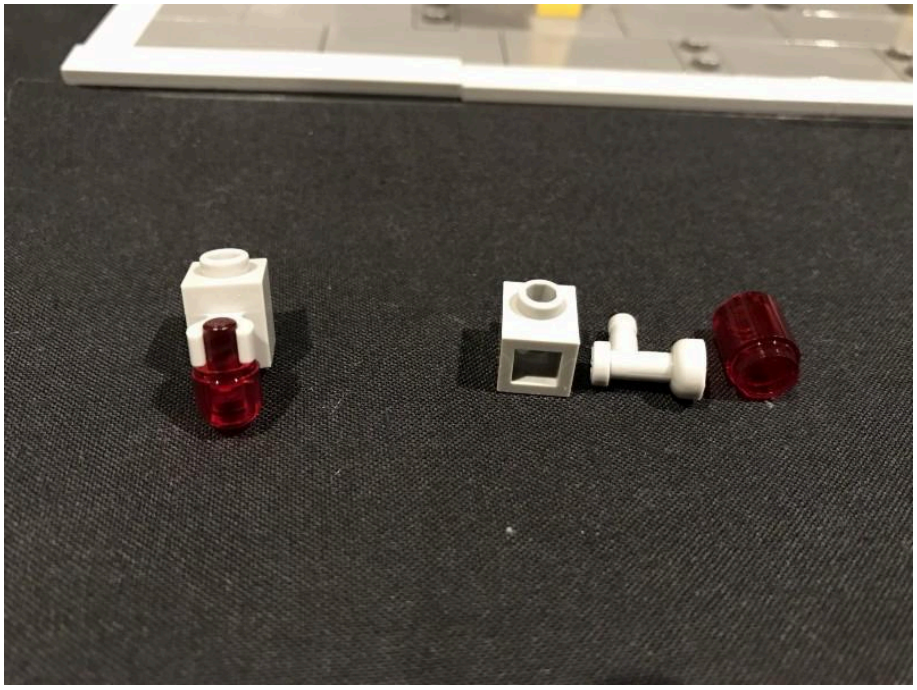
surrounding the red lights. Then remove the grey 1x1 brick with red light attached.





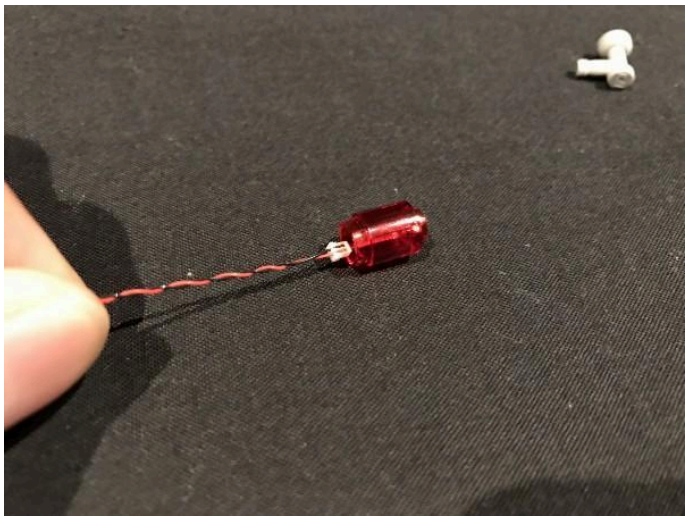


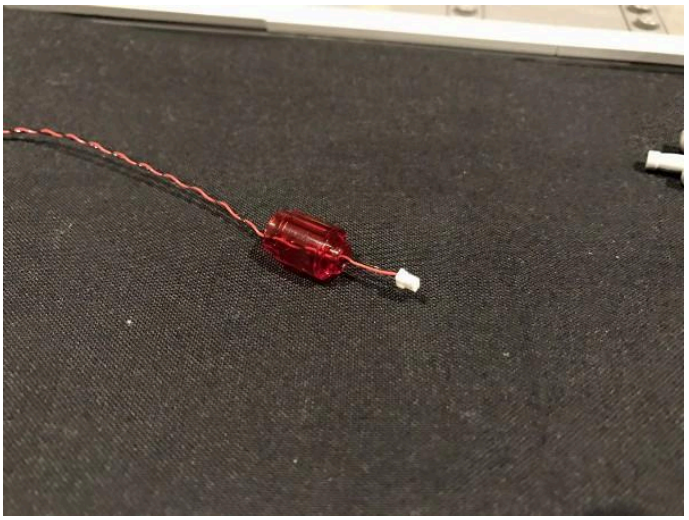
We will be replacing this section of pieces with the following pieces which came in this kit (3 pieces on the right)
2x trans red 1x1 round brick
2x light grey 1x1 modified brick with stud on one side
2x light grey “tap”



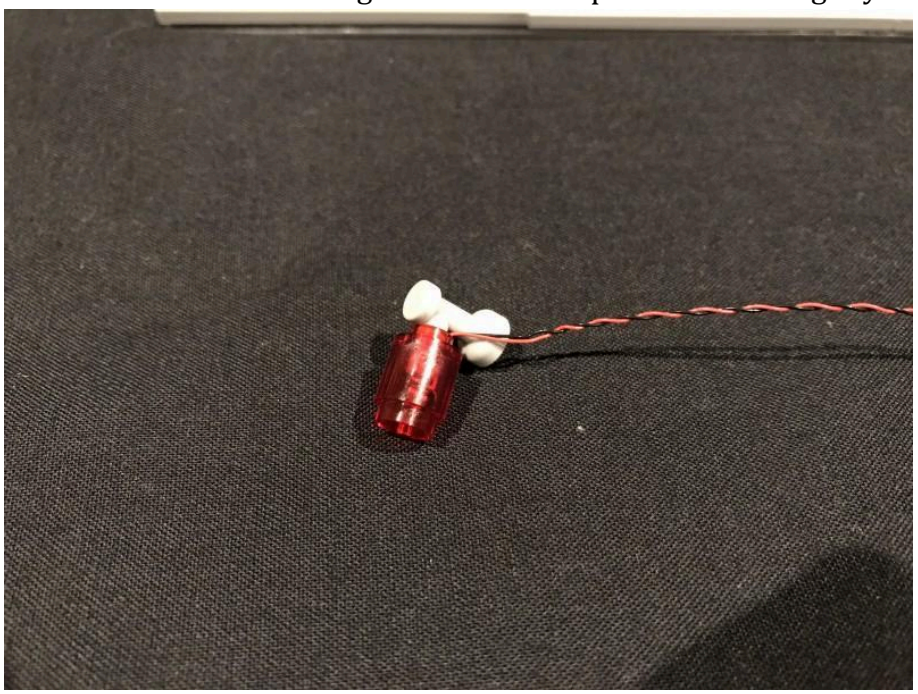
Before we reconnect these pieces, we will install flashing lights to them.

9.) Take one flashing red Dot Light and thread the connector end through the larger hole (base) of the trans red round brick. Pull it all the way through until the LED component is all the way inside the brick.

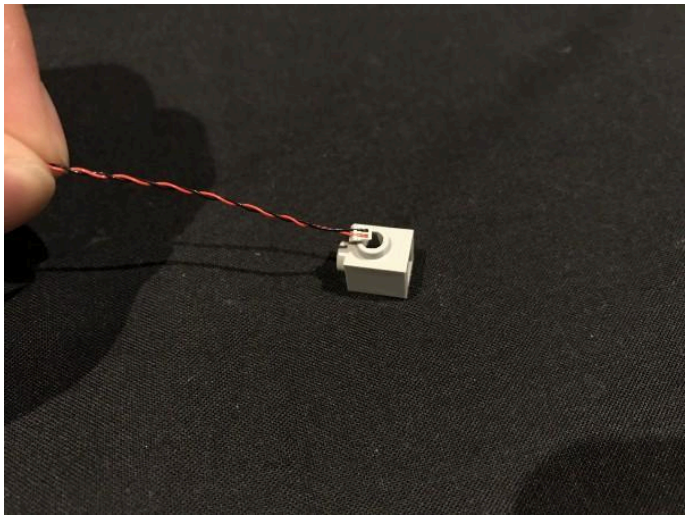
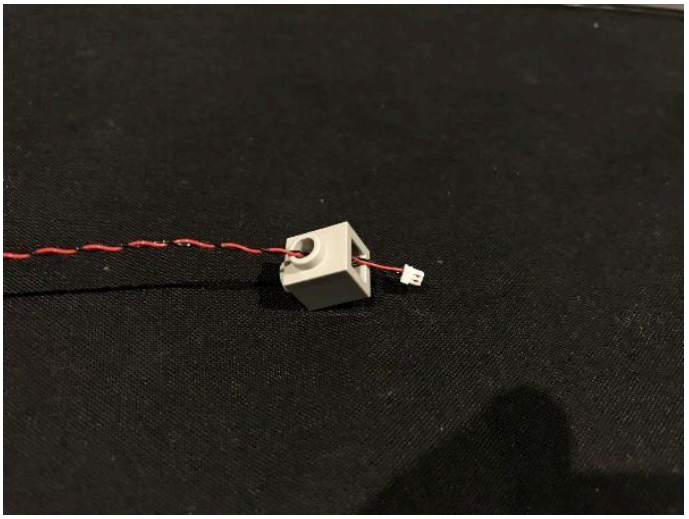
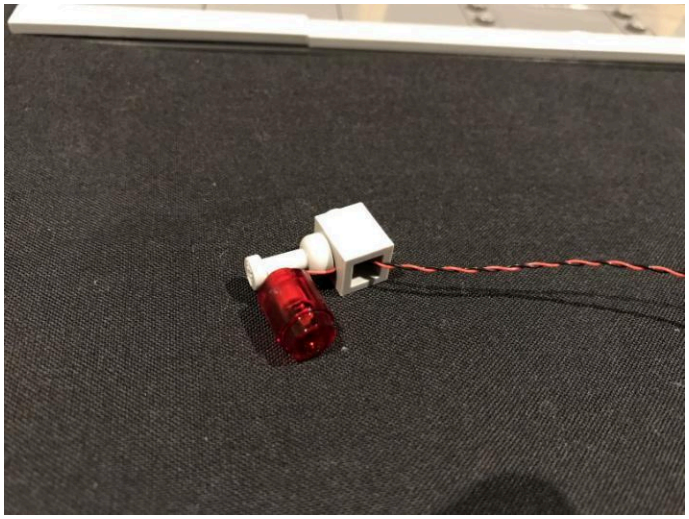




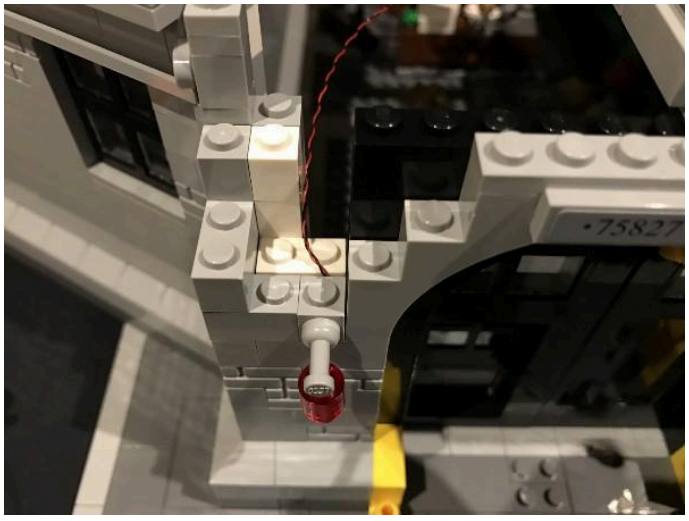
Take the light grey “tap” piece and then connect the tap end into the small hole of the trans red brick. Take extra care while doing this as this will push the LED slightly down as it connects.



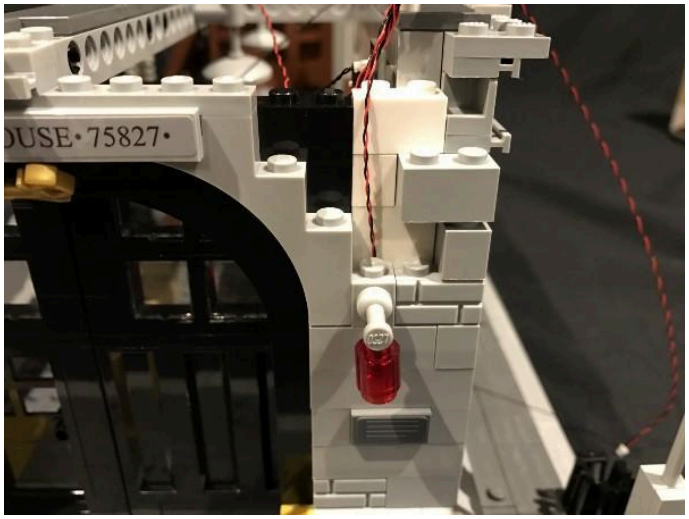
Thread the connector end through the front hole of the light grey brick and then out through the base. Pull this all the way through until you can connect the grey tap piece to the grey brick.

Connect this new red light piece to the wall then reconnect the surrounding pieces of the wall we removed earlier ensuring the cable is laid in between studs.

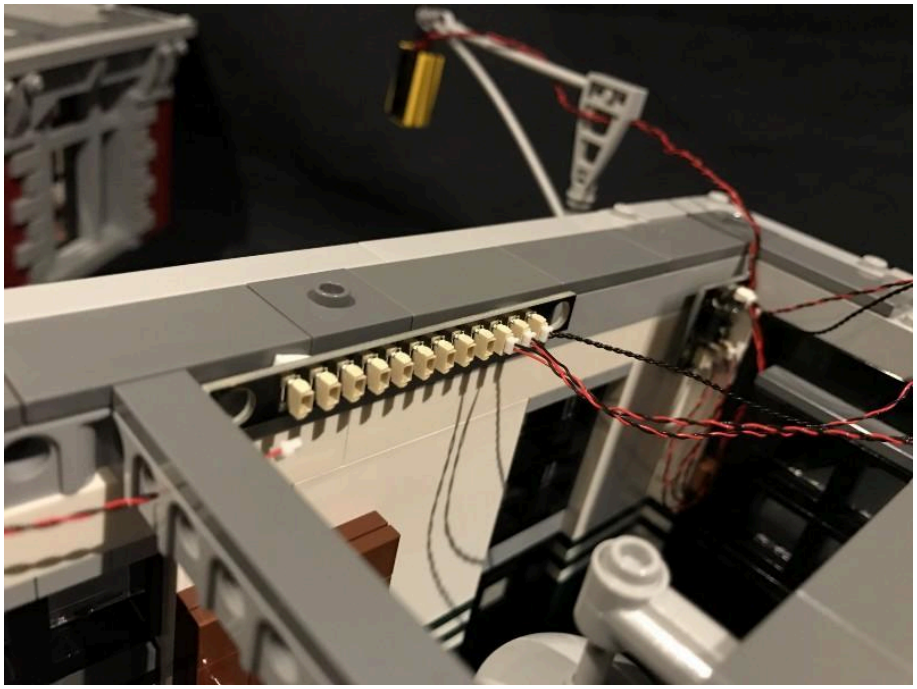



Repeat this step for the red light on the right side.

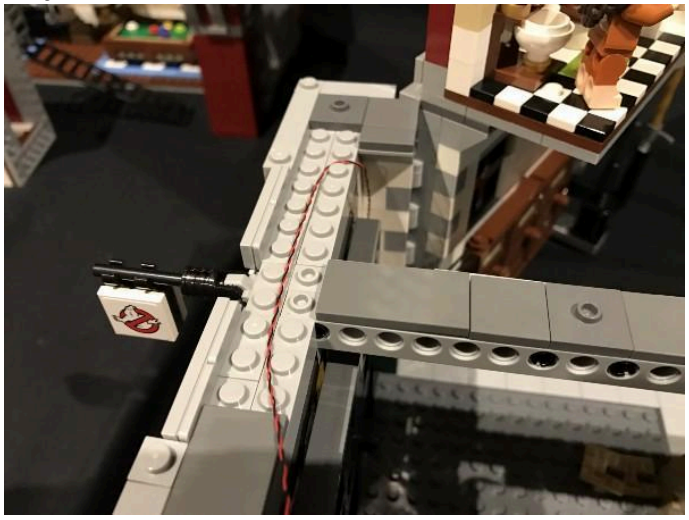
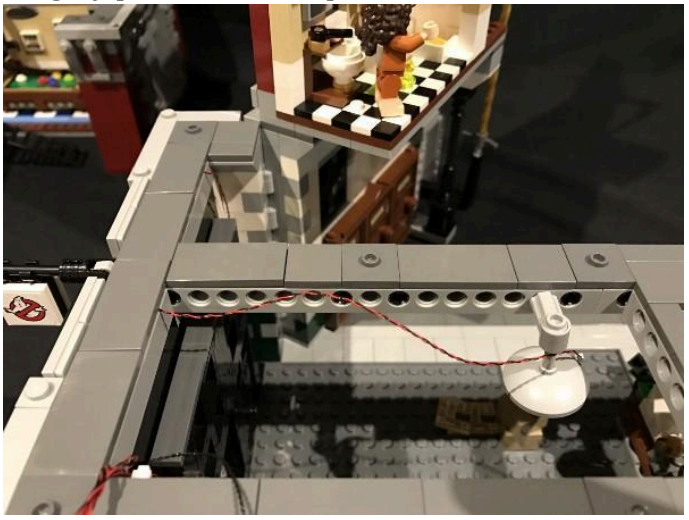


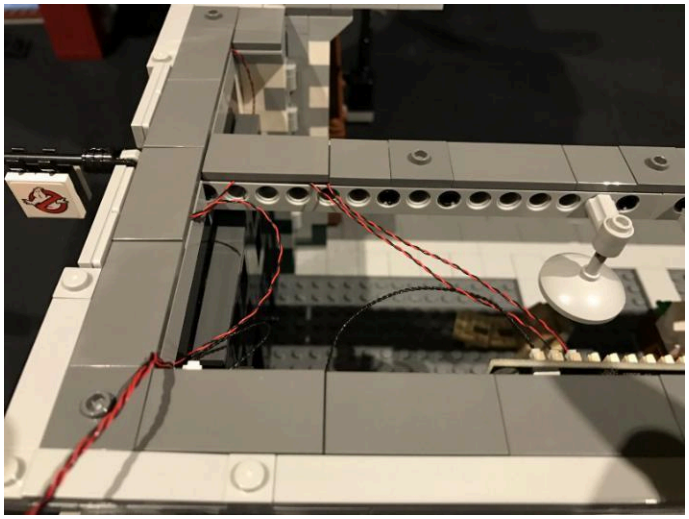


10.) Connect the 2 cables from the lights we just installed to the 12-port expansion board. We can now also mount the expansion board to the inside of the building towards the centre beam as shown below. Ensure the expansion board is mounted as close as possible to the beam.



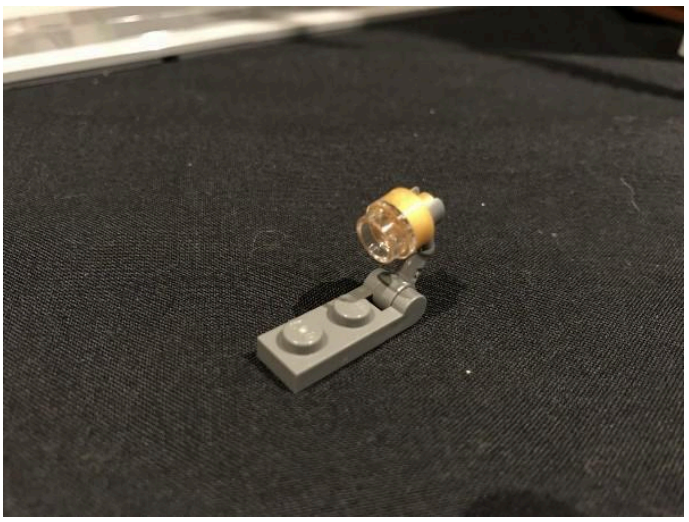
Do your best to hide the excess cables underneath the grey plates on the top.



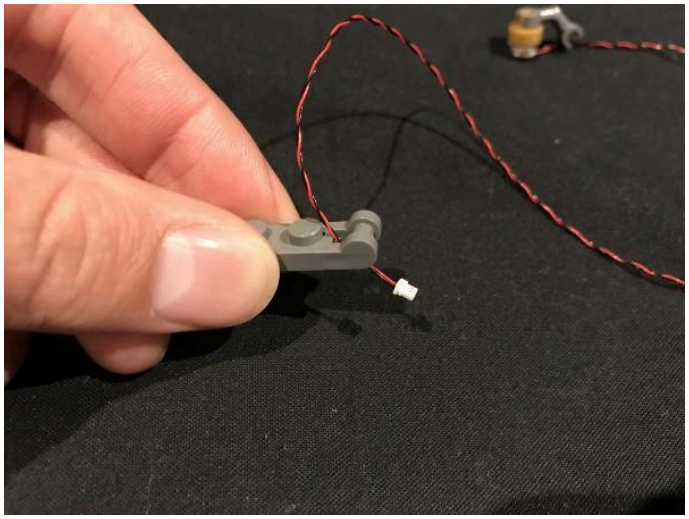
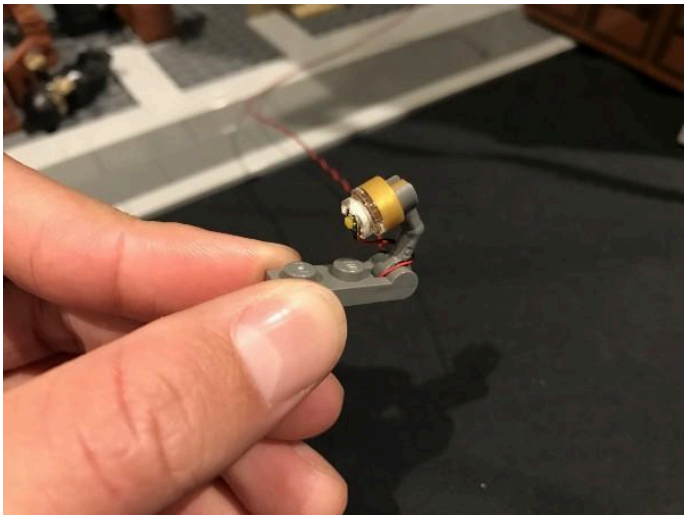
11.) We will now light up the desk lamp where Janine is sitting. Disconnect this piece and then take one Dot Light and stick to the inside of the lamp using an adhesive square. The adhesive square should be able to squeeze into the round plate.







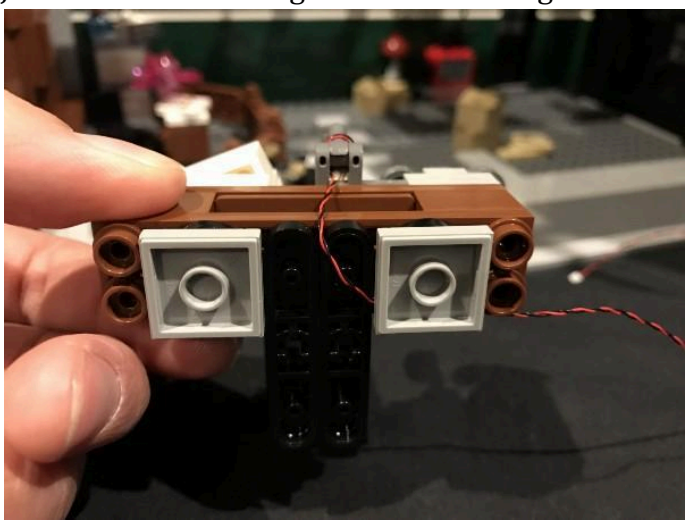
Thread the connector end of the Dot Light cable through hole of the grey base before reconnecting the lamp to it.

Reconnect the lamp with Dot Light installed to Janine's desk.



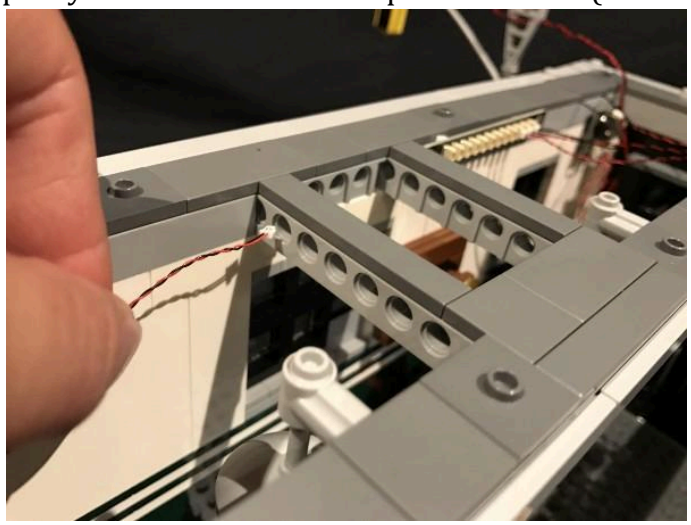
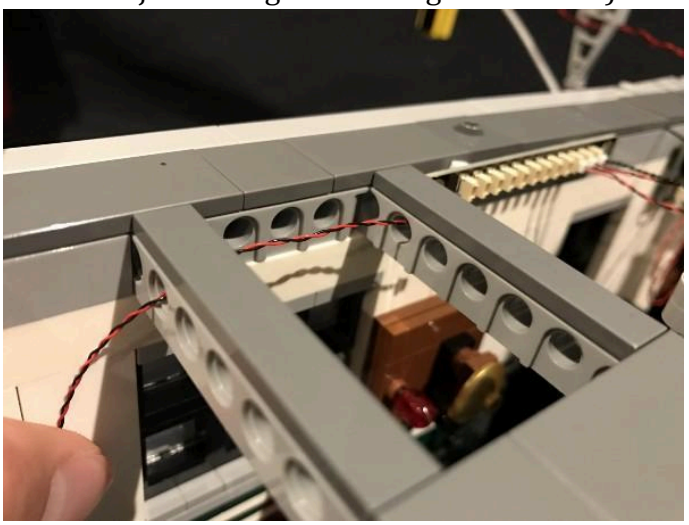
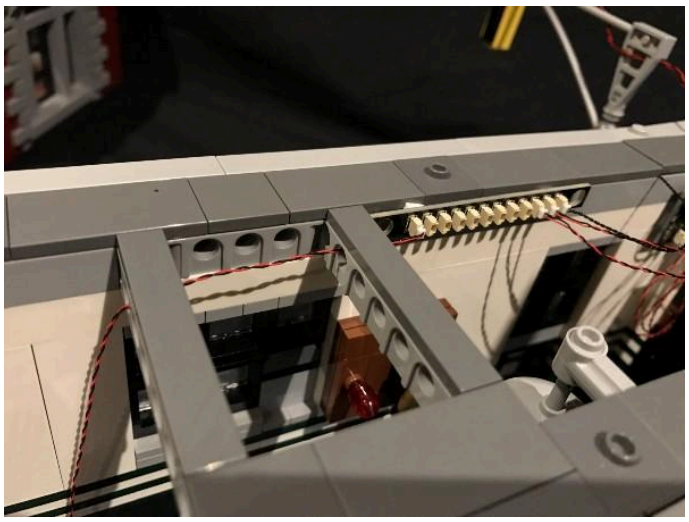
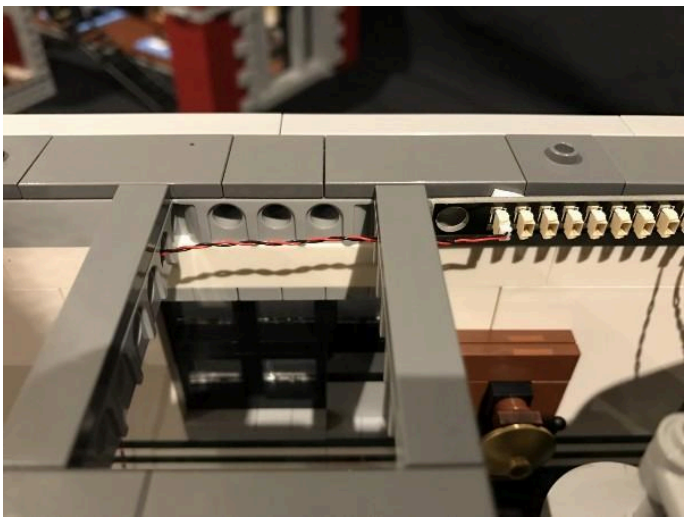
Secure the cable underneath the desk and toward the right underneath one of the grey tiles. Reconnect Janine's desk ensuring the cable is facing toward the back wall.



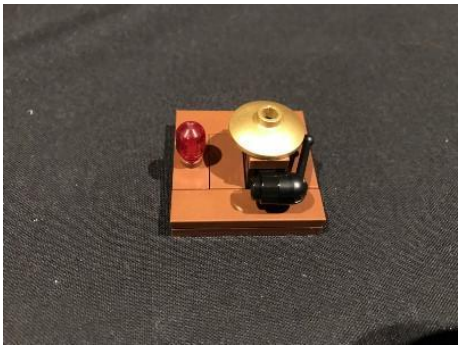
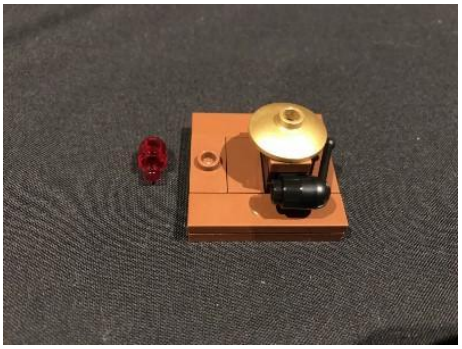

12.) Lay the cable from the desk lamp across the floor towards the wall (in between studs). You can secure the cable down using one of the "boxes".



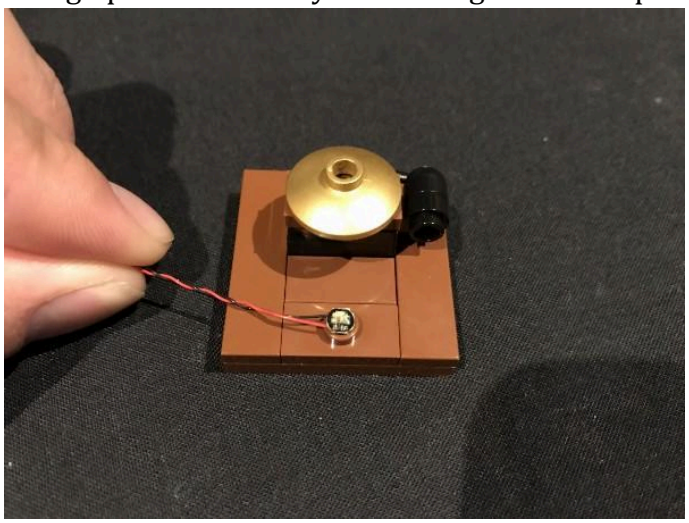
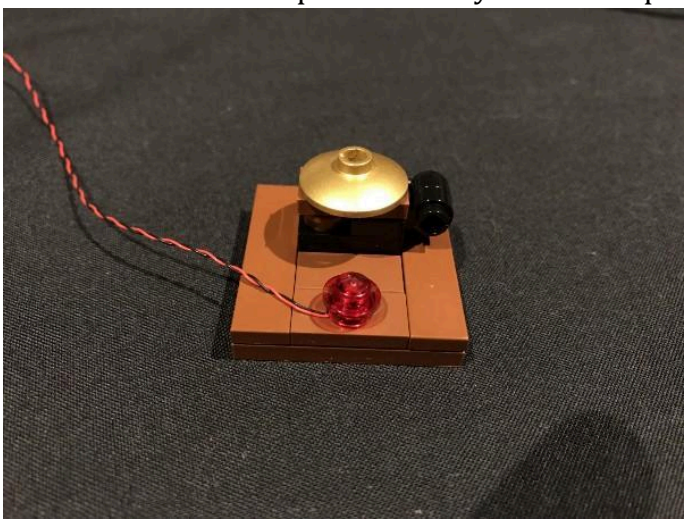
Pull the cable up and then thread the cable through the holes in the beams. Then connect it to the first port you can reach on the expansion board (You should have just enough cable length to do this).

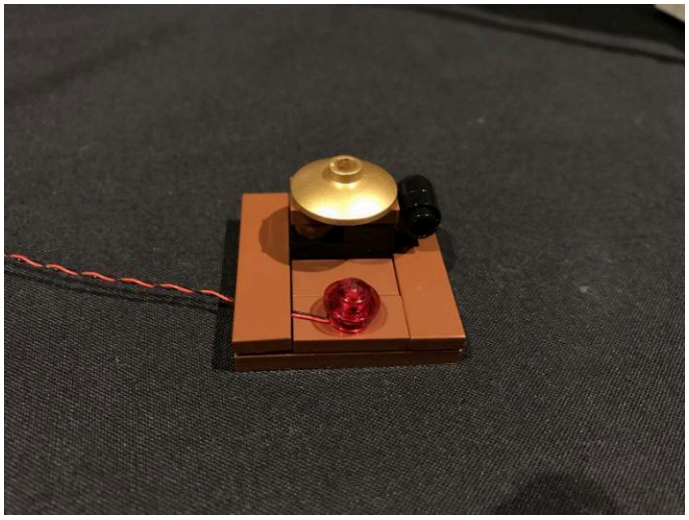
13.) We will now install a flashing light to the alarm. First disconnect this section and remove the red light piece.

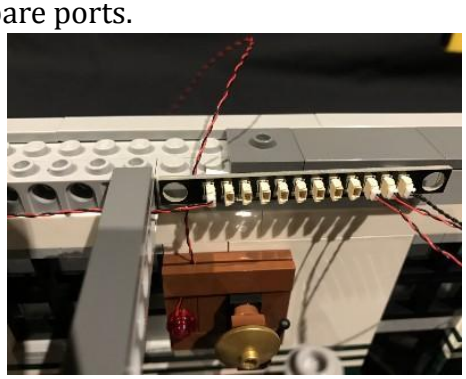
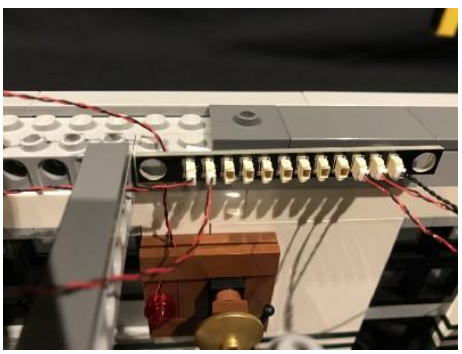
Take another red flashing Dot Light and place it on top of the brown stud with the LED component facing up. Secure this by connecting one of the provided trans red round plates directly over the top.

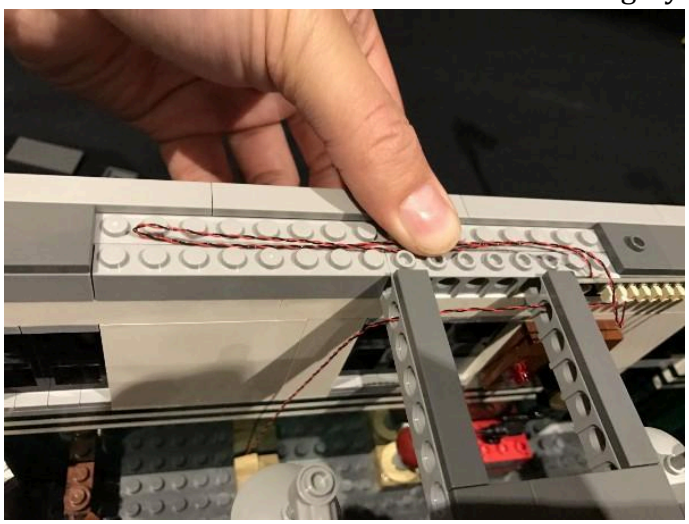
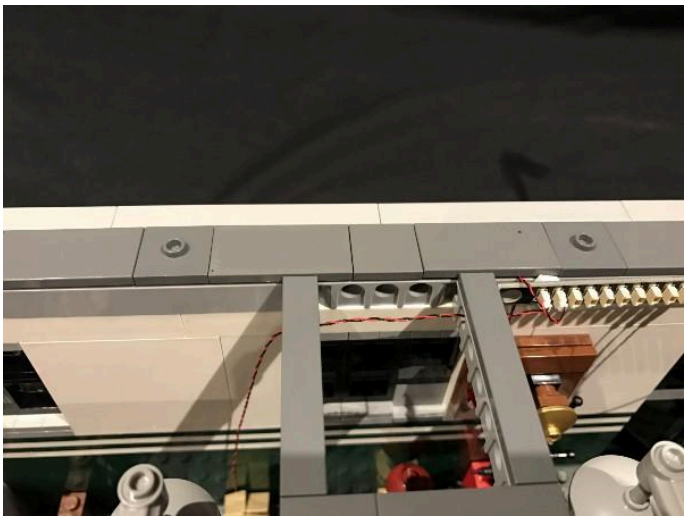
Hide the cable underneath the brown tile.



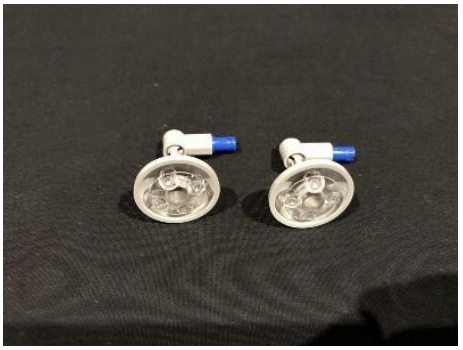
Reconnect this section back to the wall and then thread the cable behind the expansion board before then connecting it to one of the spare ports.

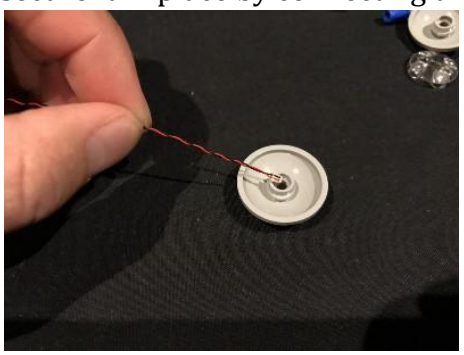
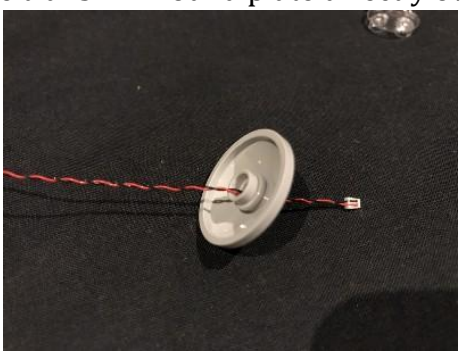
You can hide the excess cable underneath the grey tiles in between studs as shown below.

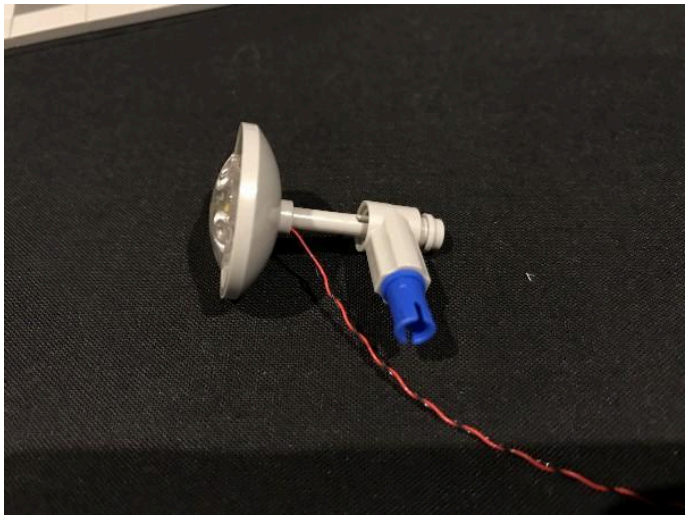
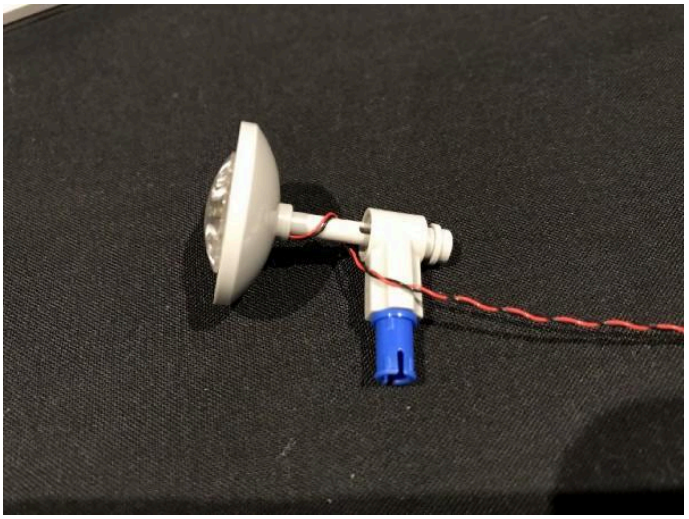
14.) We will now install Dot Lights to the 2 ceiling lights. Start be disconnecting them and then disassemble them as pictured below

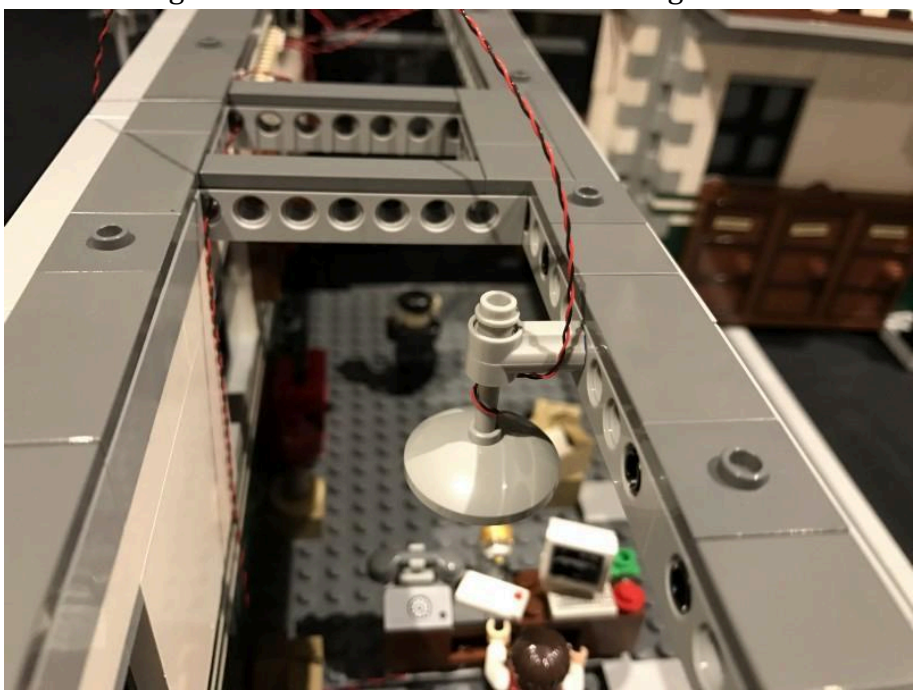

Take one Dot Light and thread the connector end through the front of the dish and then out the back. Thread this all the way through until the LED component is all way the against the dish and then secure it in place by connecting the trans 2x2 round plate directly over the top

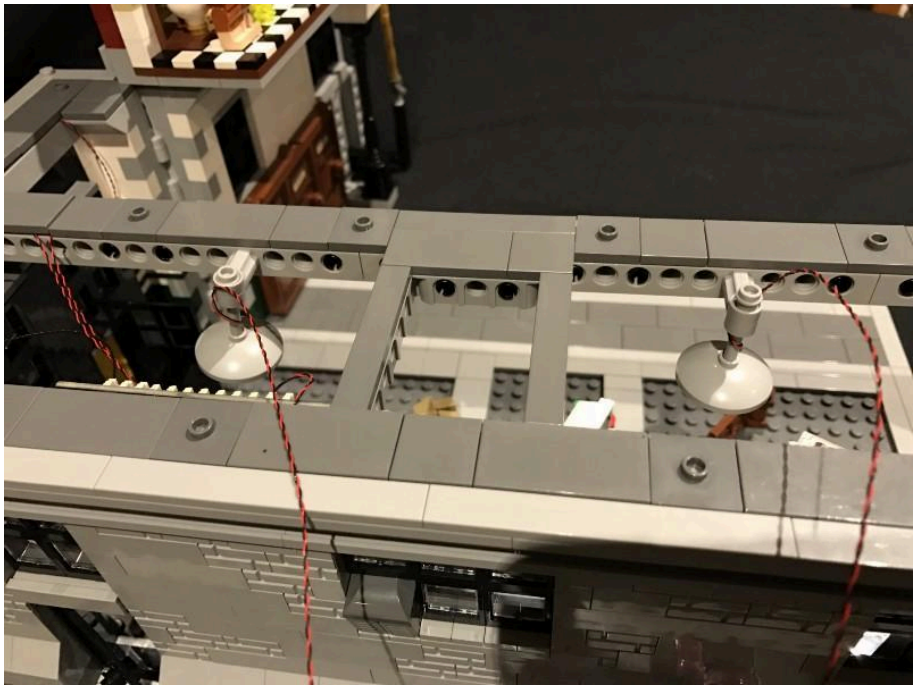

Reconnect the light back onto the pole and then wind the cable around so that the cable isn't too exposed.

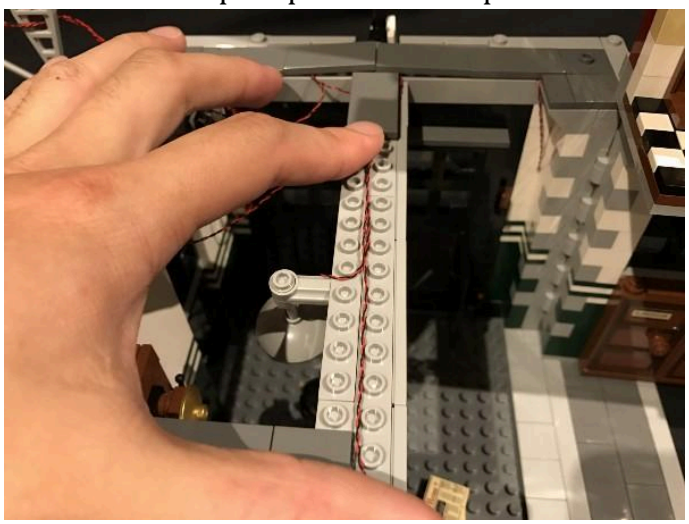
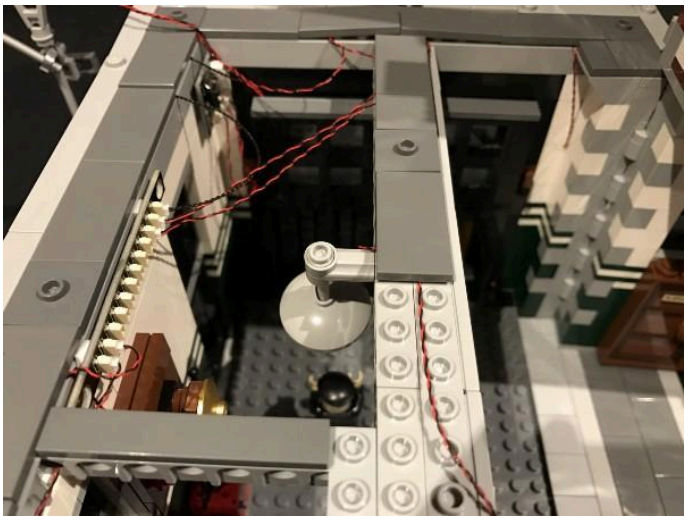
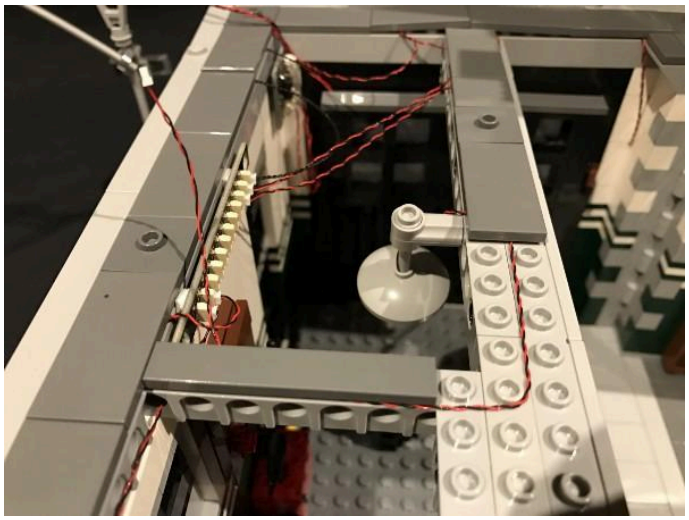
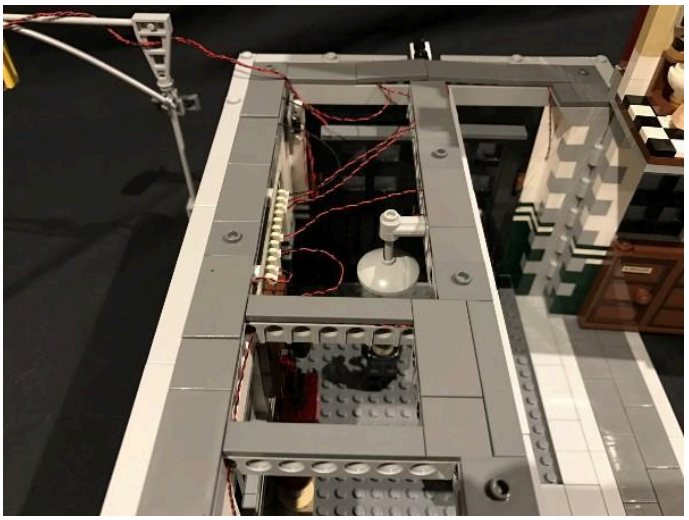
Reconnecting the entire section back to the ceiling beam.



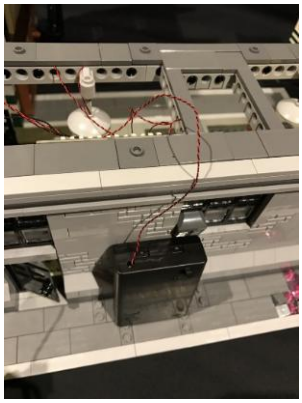
Repeat this same process for the other ceiling light



15.) Do your best to hide as much excess cable from the 2 lights underneath the dark grey tiles on top of the ceiling beam. Ensure all hidden cables are laying neatly between bricks, then connect the 2 light cables into the spare ports of the expansion board.

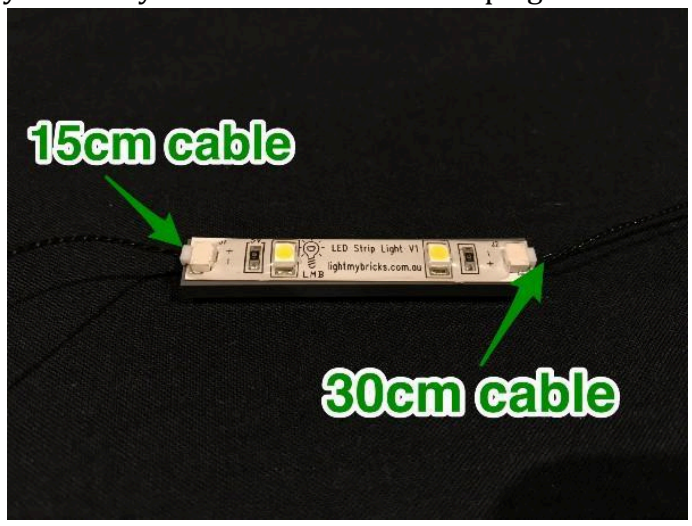





16.) It is now a good time to test our current light circuit. To do this, take the battery pack and connect the battery pack cable into one of the spare ports of the expansion board and then turn on to test all is working OK.



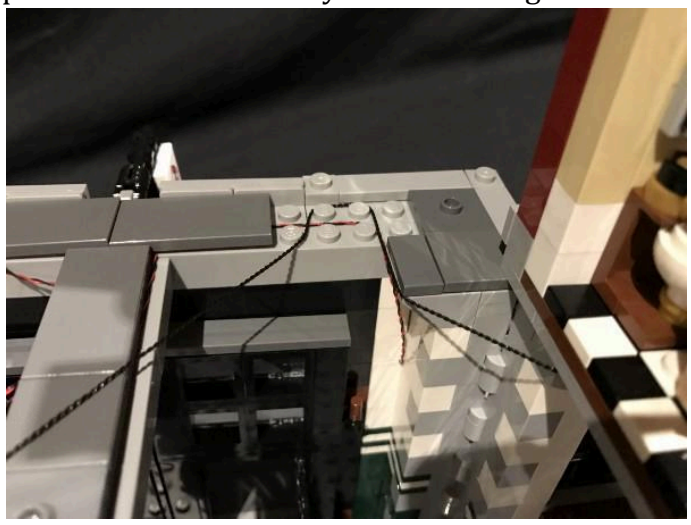
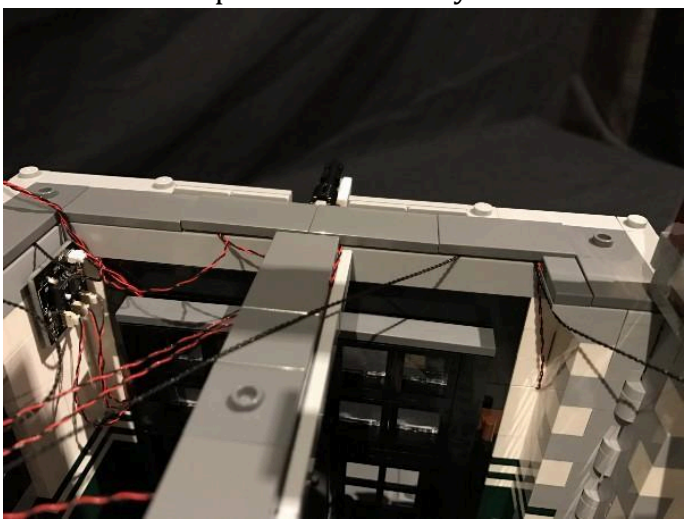


17.) We will now install some strip lights to the right side of the building starting from the section where the lockers are. Take one LED strip light and connect a 15 cm connecting cable to the left port and a 30 cm connecting cable into the right port. Connect/Stick this strip light underneath the base of the 2nd floor in the following position ensuring the 15cm cable is on the left and the 30cm cable is on the right. Connect the other end of the 30cm cable to the expansion board. To neaten the 30 cm cable, you can lay this underneath the strip light before connecting over it.

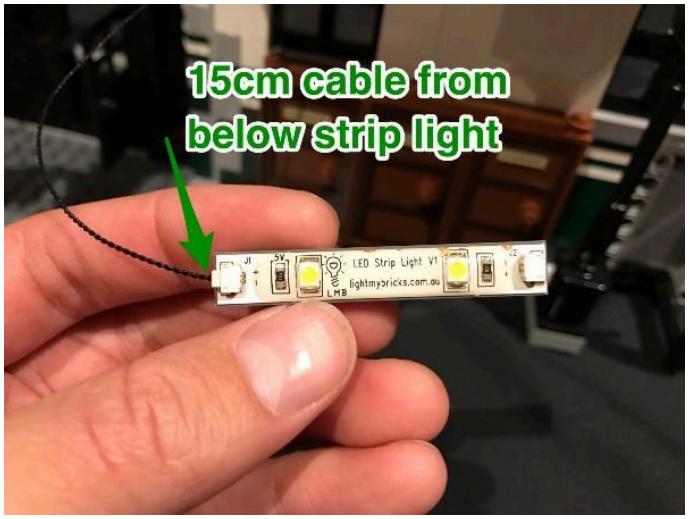




19.) Hide the excess from the 30 cm cable by laying parts of the cable underneath the dark grey tiles as pictured below. Ensure you leave enough cable for this section to open the whole way.

20.) Take another strip light and connect the other end of the 15 cm cable from the below strip light into the left port and then connect/stick this strip light underneath the base of the 3rd level (above the bathroom) as picture below.

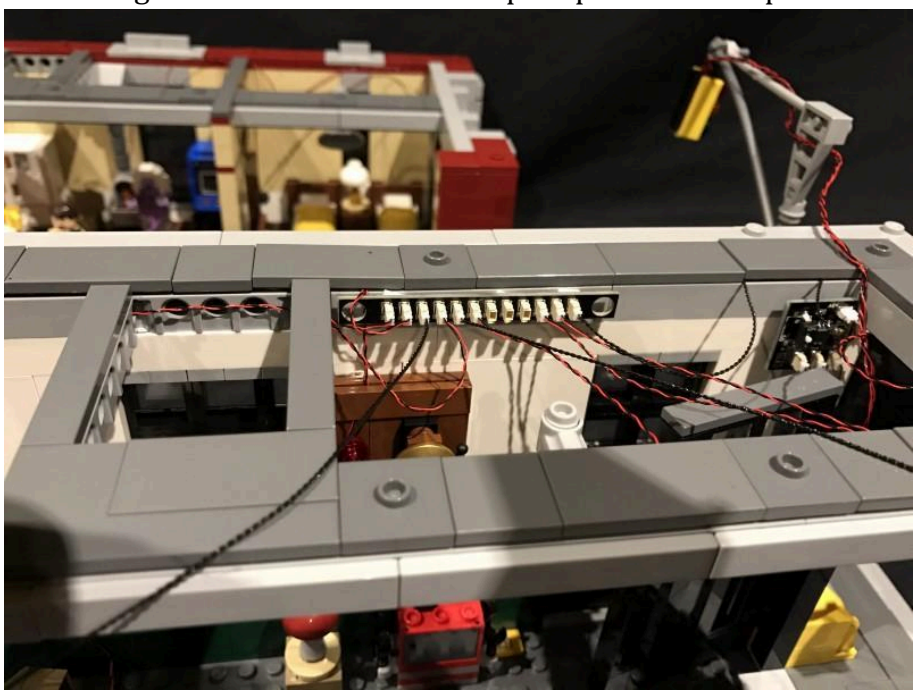




To secure the cable from being too obvious, use some tape to stick the cable to the side of the wall.

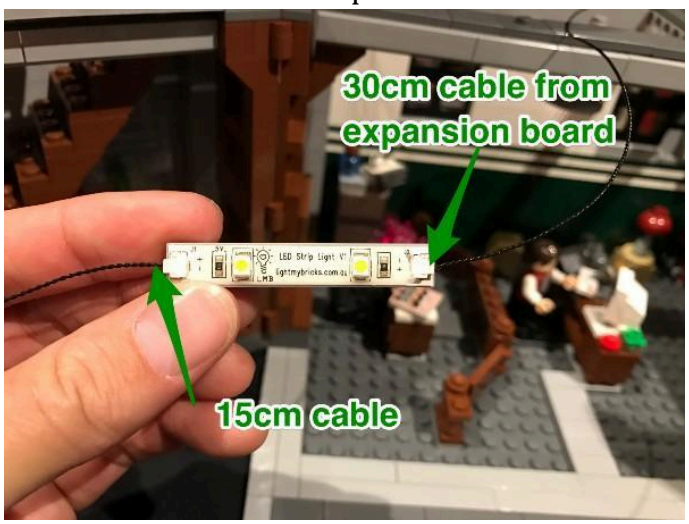


21.) We now need to install another 3 strip lights to the left section of this building. Take another 30cm connecting cable and connect it to a spare port on the expansion board.



Take another strip light and then connect the other end of the 30cm cable into the right port and then

take a 15cm cable and connect it to the left port. Connect/stick the strip light onto the bottom of the second floor in the below position.





Secure the excess cable from the 30cm cable underneath tiles as shown below. Ensure you leave enough cable to open and close this section of the building.



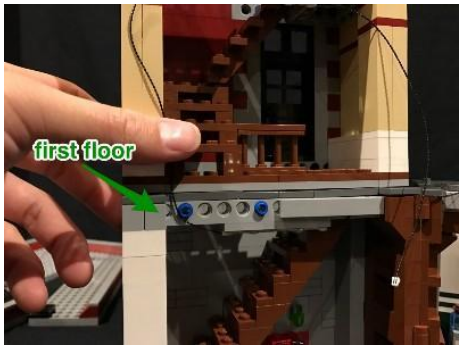


22.) Take another strip light and then connect the other end of the 15cm cabe from below strip light to the left port. Take another 15cm cable and connect it to the right port and then connect/stick it underneath the base of the 3rd floor in the below position





Hide and secure cables underneath the following tiles as shown below.







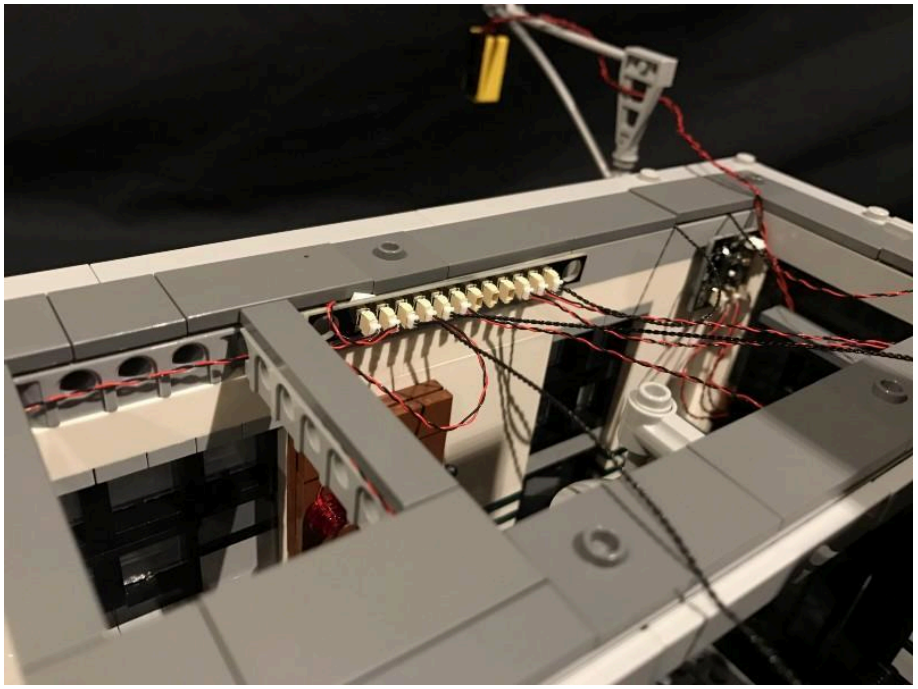
23.) Take another strip light and then connect the 15cm cable from the strip light underneath to the right port, then stick/connect this strip light underneath the roof in the below position.




You can use sticky tape to secure cables, like what I have done here.

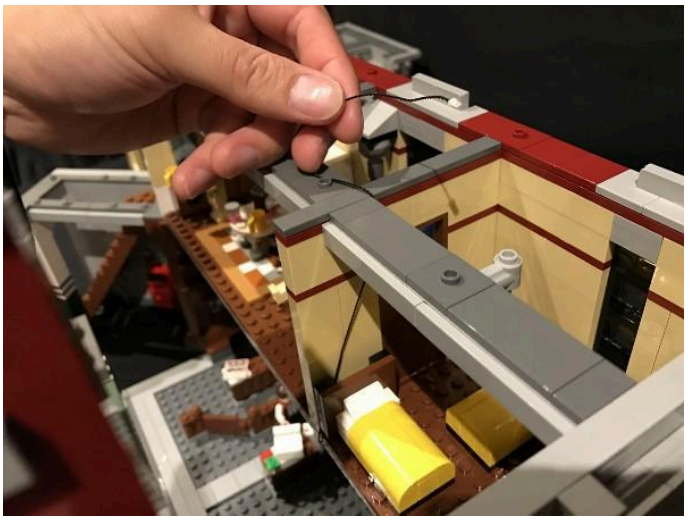


24.) We will now move on to lighting the second floor. Before we do so, connect another 30 cm cable to a spare port of the 12-port expansion board (spare port closest to the left side) and then lay it across the beams towards us.

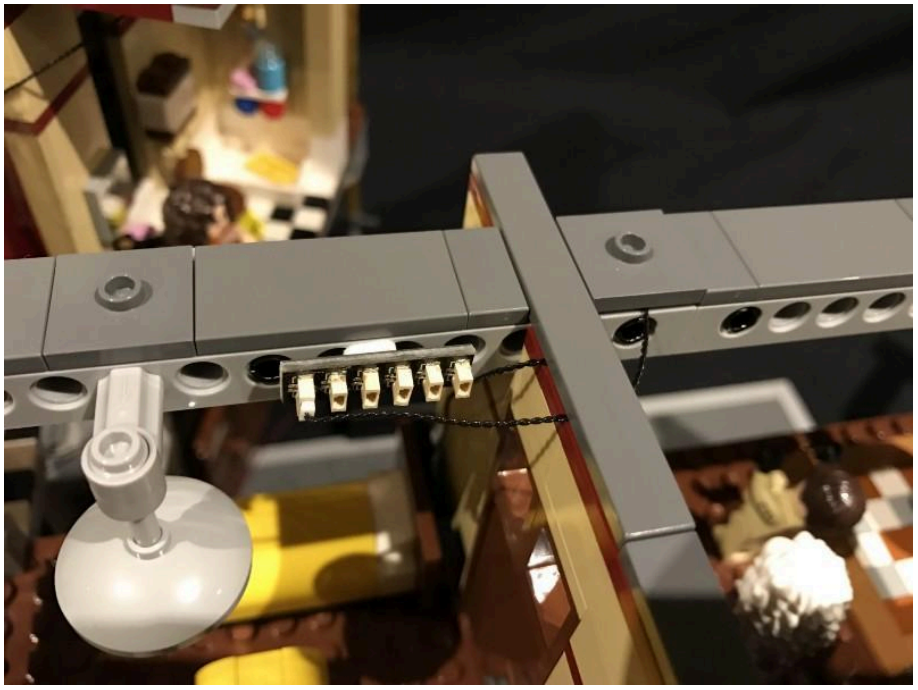


25.) Take the entire second floor and place it on top of the ground floor. Then pull the 30cm cable up from underneath, and up the centre wall, up behind the bed head frame and then up underneath the ceiling beam.





26.) Connect this cable into the right port of one of the 6-port expansion boards. Mount the board to the inside of the ceiling beam using one of the adhesive squares. Ensure you are mounting it in the following position, then hide the excess cable underneath the dark grey tiles.

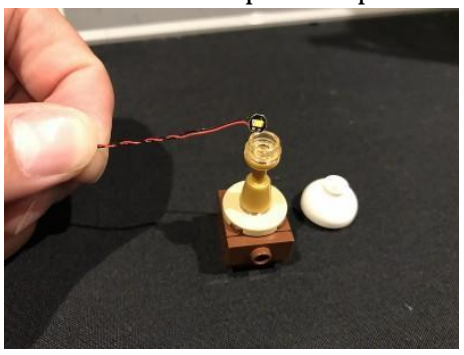
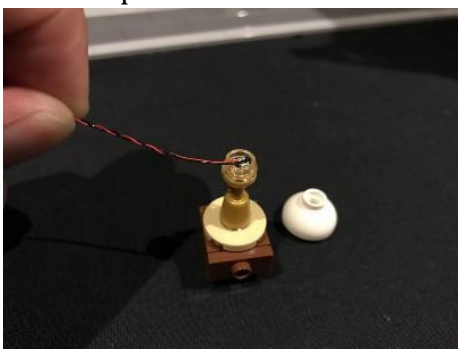


27.) We will now install a Dot Light to the bedroom lamp. Start by removing the lamp as well as drawers underneath, then remove the lamp shade.

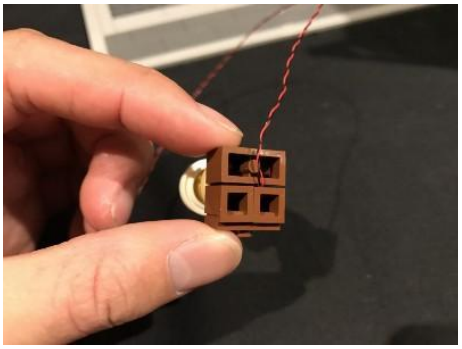




Take one Dot Light and with the LED component facing down in the middle of the trans round piece, reconnect the lamp shade piece over the top.

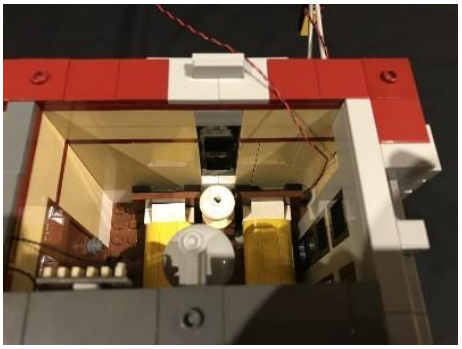

Hide the cable for the lamp underneath the cream round plate, then in between the brown bricks and then underneath the brown 2x2 plate (in between studs)

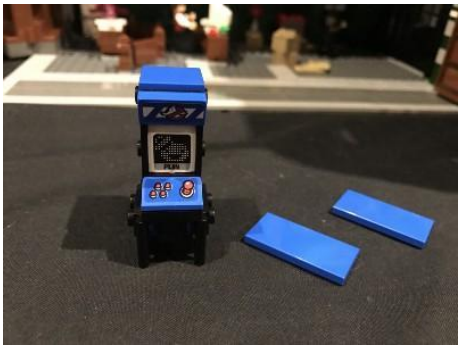

Reconnect this section with Dot Light installed back to original position



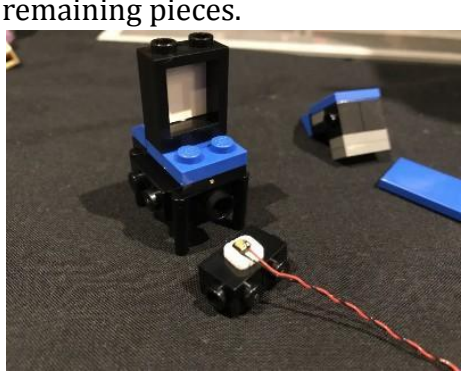
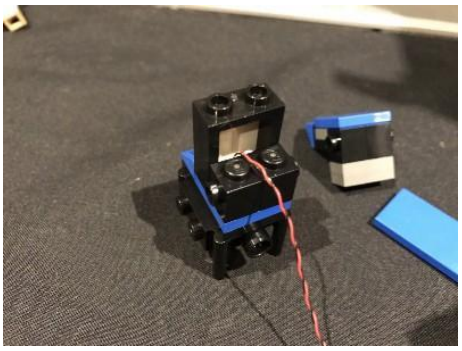
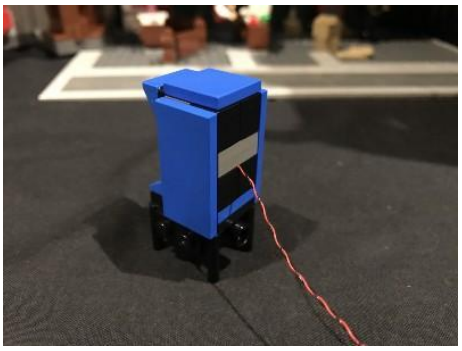
28.) We need to hide the cable behind the bed on the right. First remove the bed and then lay the cable across the floor and then up the corner side of the wall. Reconnect the bed and then connect the Dot Light cable to the next available port on the 6-port expansion board. You can hide any excess cable underneath the tiles on the top.


29.) We will now install a flashing Dot Light to the video arcade game. Start by removing this section and then disassembling starting with the pieces below. Keep the two black bricks as we will require this for the next step


Take one flashing Dot Light (cool white) and stick it to the back of the two black bricks using an adhesive square (in the middle). Then reconnect these two pieces back so that the Dot Light is facing toward the front of the arcade game. Lay the cable in between the black studs before reconnecting the remaining pieces.

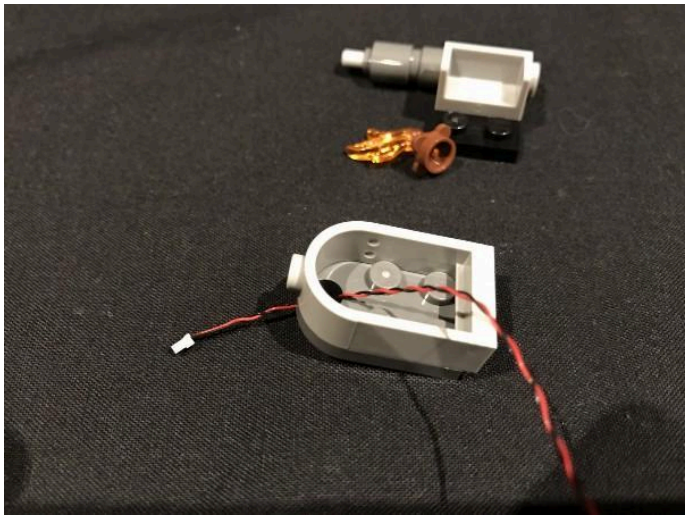
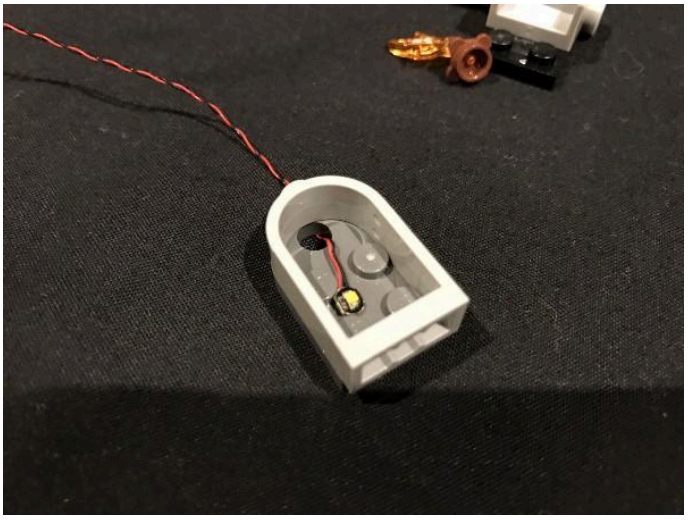
Reconnect the video arcade game with flashing light installed.



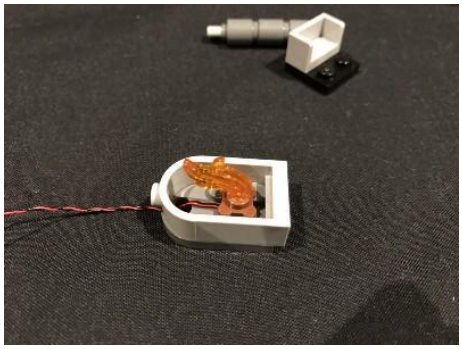
30.) We will now install a light to the fire place. Disconnect the fireplace section and the disassemble the following pieces.




Take one standard Dot Light and then thread the connector end through the hole of the back of the chimney piece and then pull it all the way through until the Dot Light can be placed in the middle of the 4 grey studs.

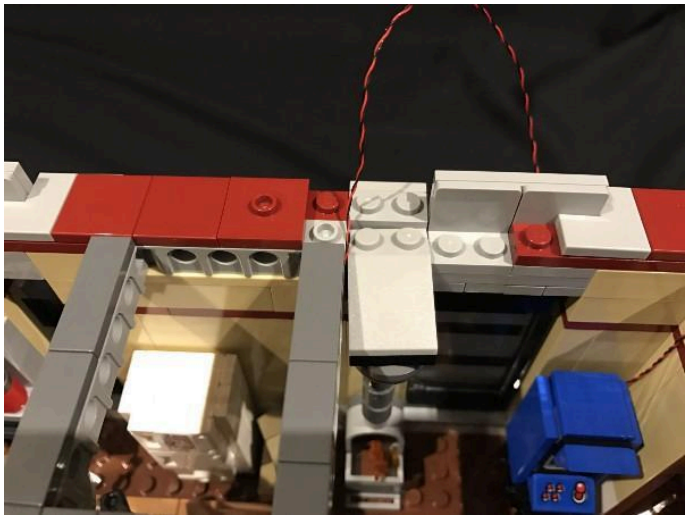
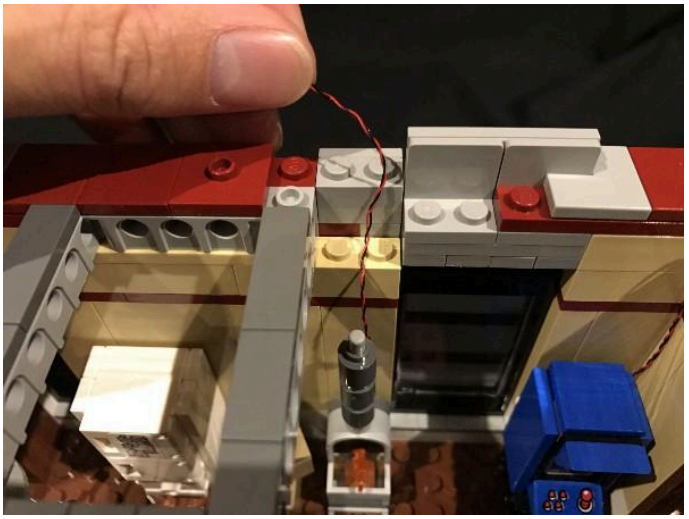
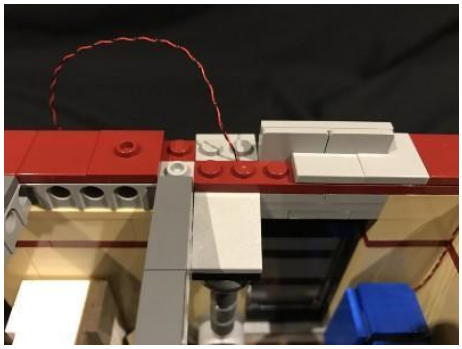
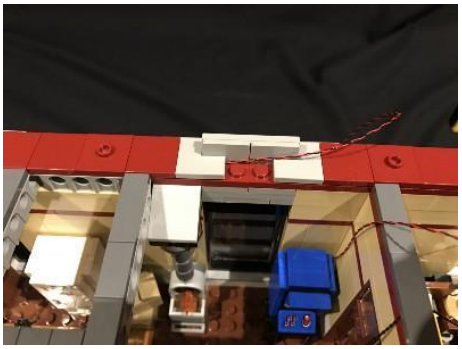
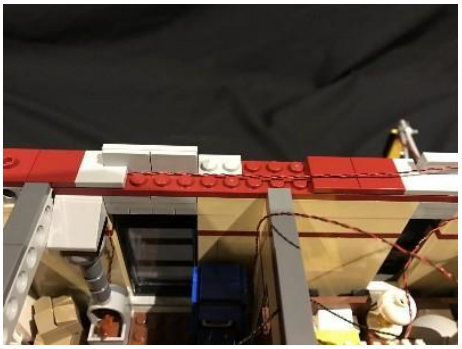



Secure the Dot Light in place by reconnecting the fire piece directly over the top, then reconnect the pieces of the fire place. Reconnect the chimney with light installed to original location.

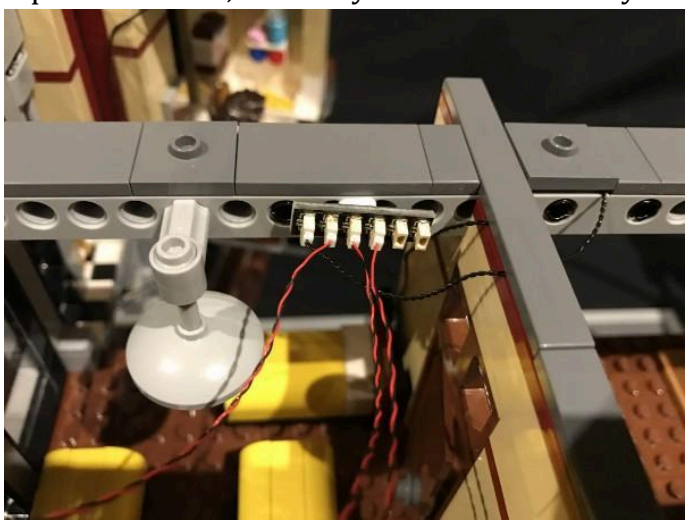




31.) Thread the cable from the fire place light up the wall and then lay it behind the grey roof piece in between studs as shown below. Reconnect the grey room piece over the top of the cable and then thread the rest of the cable across toward the right of the building, laying underneath the tiles above.

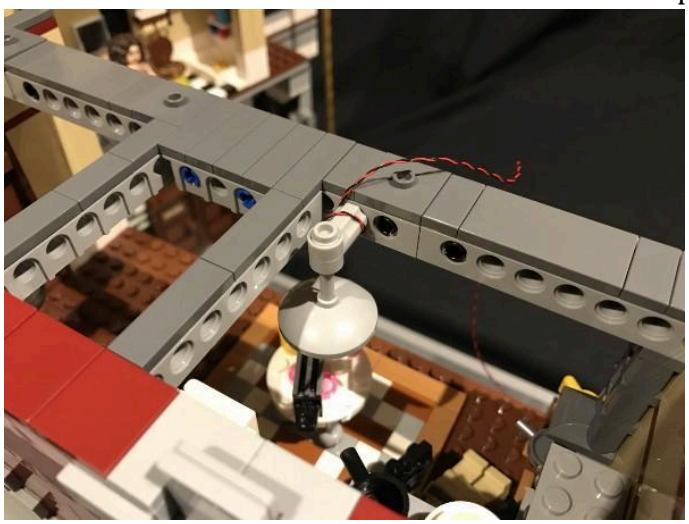
32.) Connect the lights from the video arcade game and fire place to the next ports on the 6-port expansion board, then do your best to hide any remaining excess cable underneath tiles.

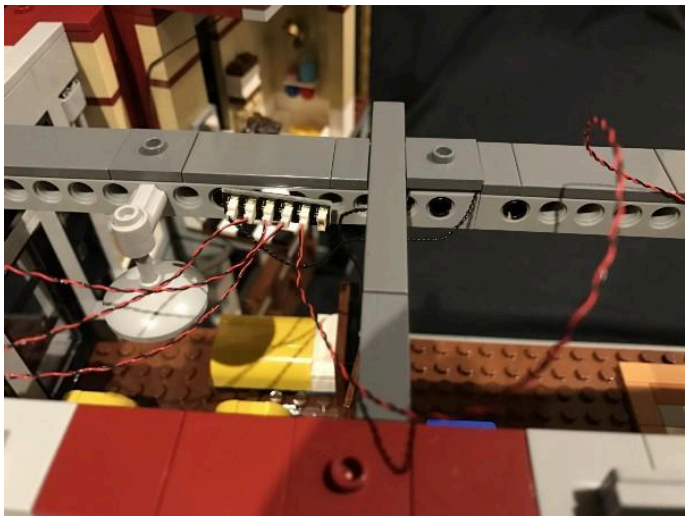



33.) We will now install a Dot Light to the kitchen ceiling light. Disconnect this light piece and then use the same method as we did for the lights on the ground floor to install another Dot Light (see step 14).

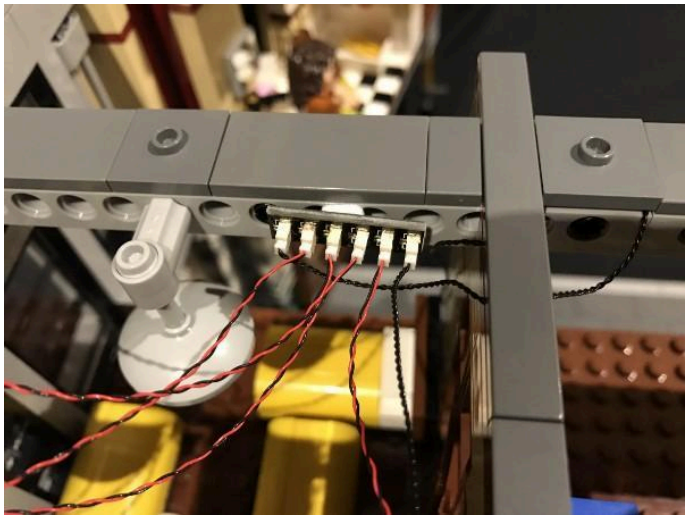
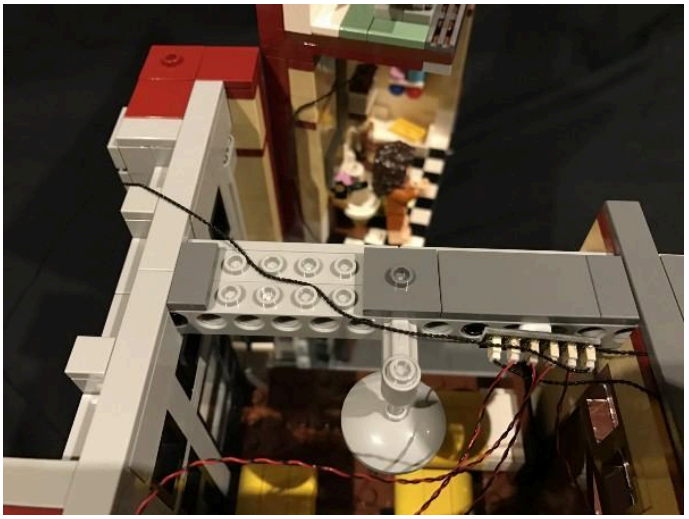
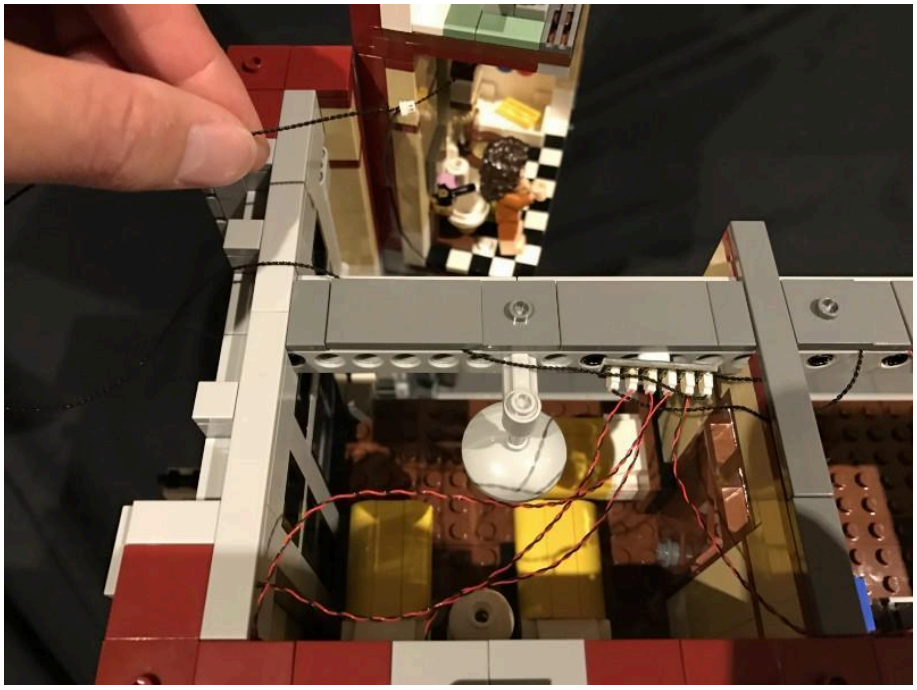


34.) Once you have installed another Dot Light to this light piece, reconnect it to the ceiling beam and then lay the cable across the beams toward the expansion board, laying excess cable underneath tiles as shown below. Connect this cable into the next spare port of the expansion board.






35.) Take another 30 cm connecting cable and connect it to the last remaining port on the 6-port expansion board. Thread the cable across to the side of the building and hide underneath tiles as shown below

36.) Take the entire 3rd level and connect it over the 2nd level. Take the 30cm cable from the level below and then pull it up the side of the wall and then over the ceiling beam securing the cable underneath tiles. Ensure the cable is laid in this position (shown in below images) as we need to ensure we have just enough cable length to reach the other side of the beam.




37.) Connect the 30cm cable into the right port of another 6-port expansion board. Turn the building around and then mount the expansion board to the inside of the ceiling beam as close as you can to the right (as far as the cable can reach).



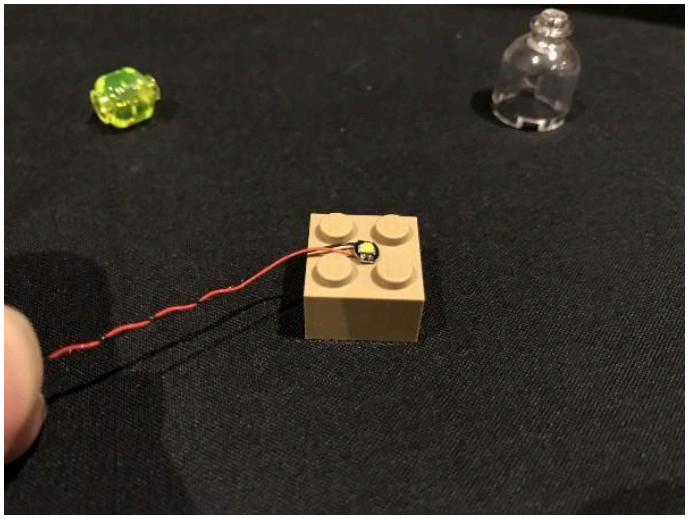
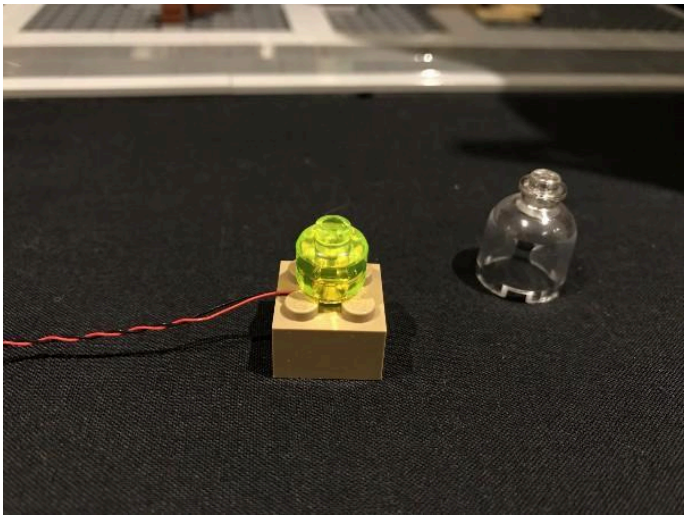
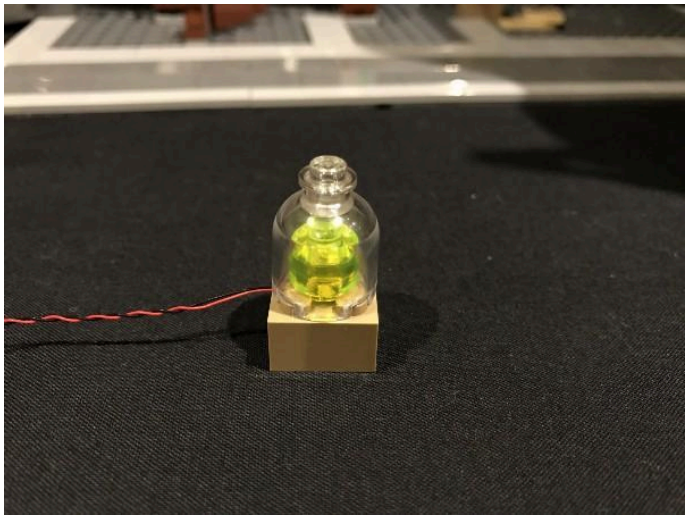

Note: If you do not have enough cable length you will need to go back and ensure you have threaded the cable the exact way that I did.

38.) We will now install a light to the slime bowl next to the computer. Remove this as well as the brick underneath and disassemble the pieces as per below.

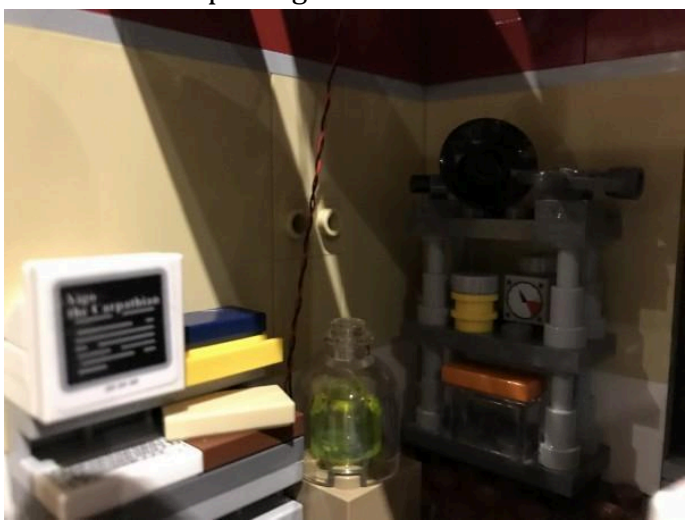




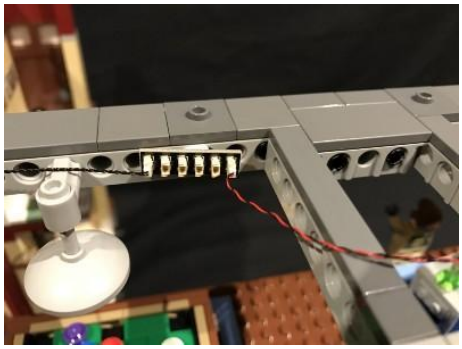
Take one Dot Light and place it in between the studs of the 2x2 brick, and then secure it in place by reconnecting the fluro trans green head over the top. Ensure the LED component part is facing the correct way up. Reconnect the trans piece over the top and then reconnect this section back to the floor with the cable facing the wall.

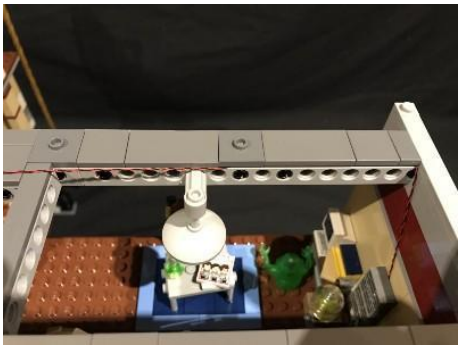





Pull the cable up along the side wall and then hide the cable behind the wall piece as per below.

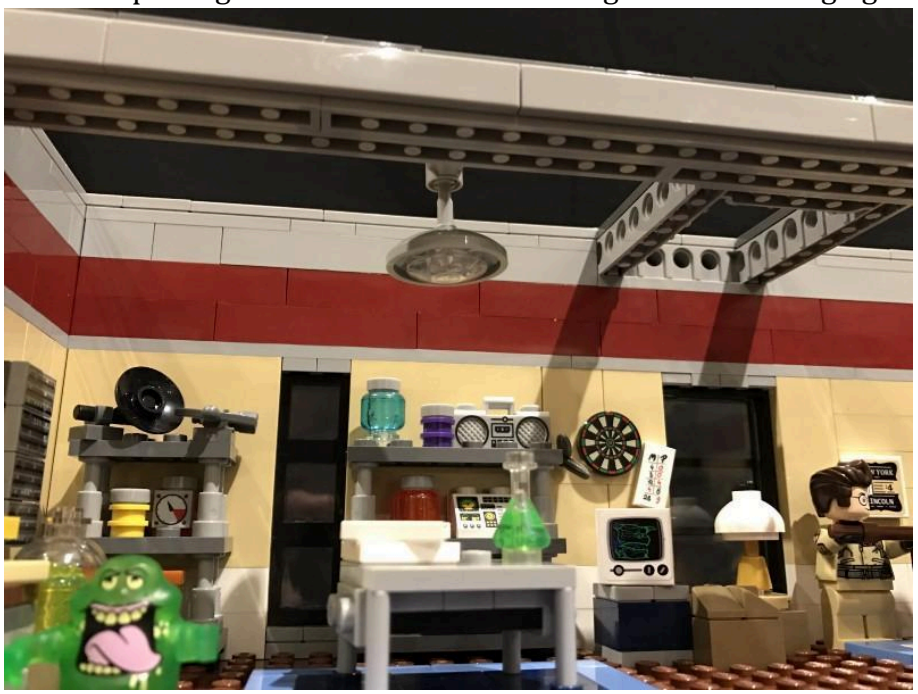



39.) Connect this cable into the port closest to the side on the 6-port expansion board on the other side of the room then do your best to hide all the excess cable underneath tiles across the ceiling beams.

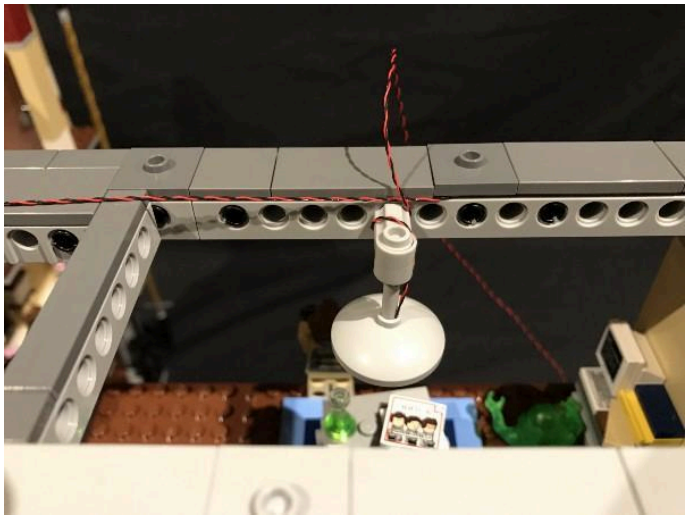
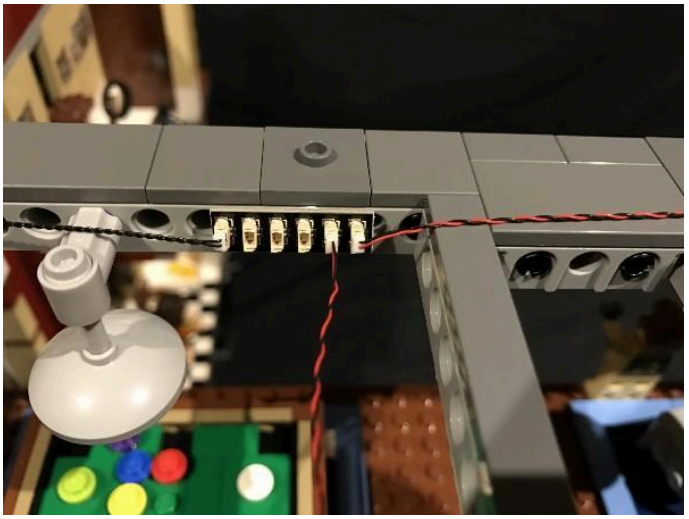


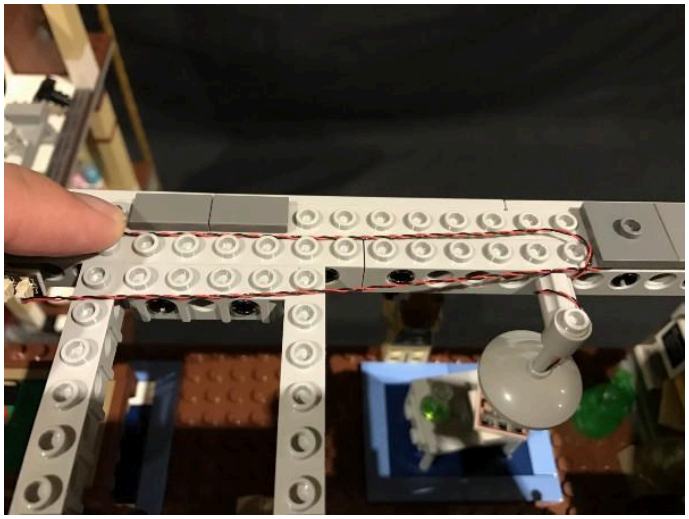


40.) We will now install another Dot Light to the ceiling light above. Remove this piece and then follow step 14 again to install another Dot Light to this ceiling light.

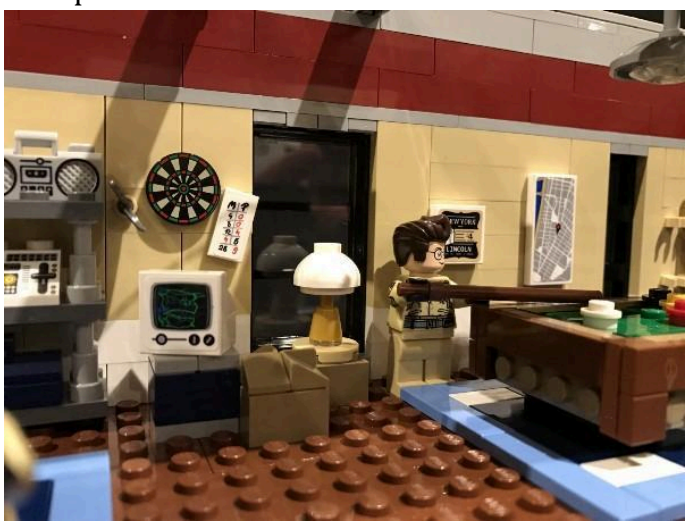


Once you have installed another Dot Light to this ceiling light, reconnect it to the ceiling beam and then connect the other end into the next available port on the 6-port expansion board. Again, hide excess cable underneath the tiles.

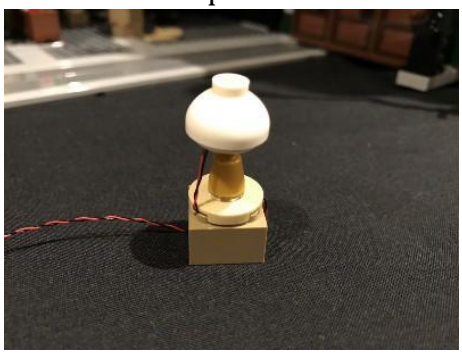
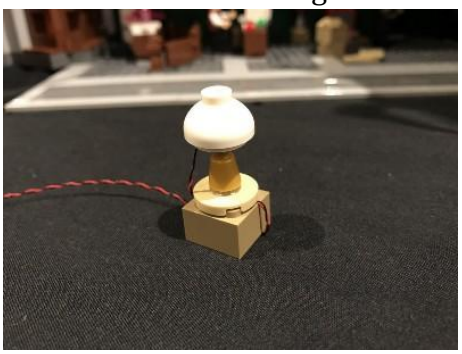





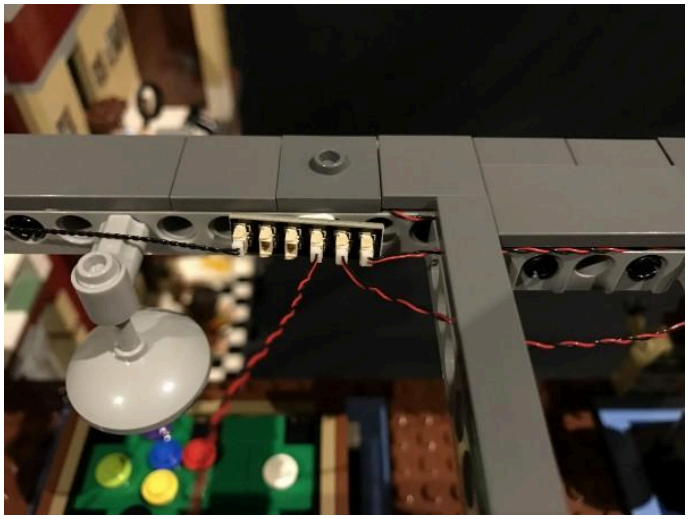

41.) We will now install a light to the window lamp. First remove this lamp as well as 2x2 brick underneath. Install another Dot Light to this lamp following the same process as the bedside lamp in step 27.

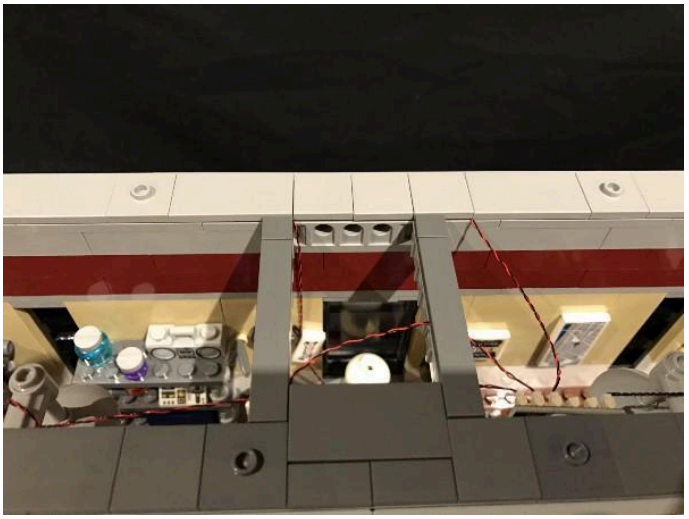



Once you have installed a Dot Light to this lamp, lay the cable underneath across the round plate. Pull it across and then lay it back underneath the 2x2 brick across so it comes out the other side. Reconnect this piece back in front of the window ensuring the cable is facing toward the left.


42.) Connect the other end of the lamp Dot Light cable into the next port on the 6-port expansion board and then secure the cable to the back wall in between the dart board and score board. As always, hide any excess cable underneath tiles on the ceiling beams as shown below.



43.) We will now install a Dot Light to the final ceiling light. Remove this piece and then again, follow step 14 to install the last Dot Light to this ceiling light.



Once you have installed the last Dot Light, reconnect the ceiling light back to the ceiling beam and then connect the other end of the Dot Light to the next port on the 6-port expansion board. Hide the excess cable underneath the tiles on the ceiling beam as shown below.



44.) Take a 30cm connecting cable and connect it to the final port on the 6-port expansion board. From the front side, pull the cable across toward the right and then toward the front in between the studs and underneath tiles. Reconnect the tiles over the cable to secure it in place.



45.) Take the entire roof of the ghostbusters headquarters and reconnect it over the top ensuring you can still access the loose 30cm cable we just connected.

46.) Take the final strip light and connect the other end of the 30cm cable to the right port and then connect/stick the strip light to the roof above where Louis Tully is standing. Ensure the 30cm cable is on the right and the left port is free.




47.) Take the battery pack and place it on roof in the following position. Ensure the on/off switch is facing upward.

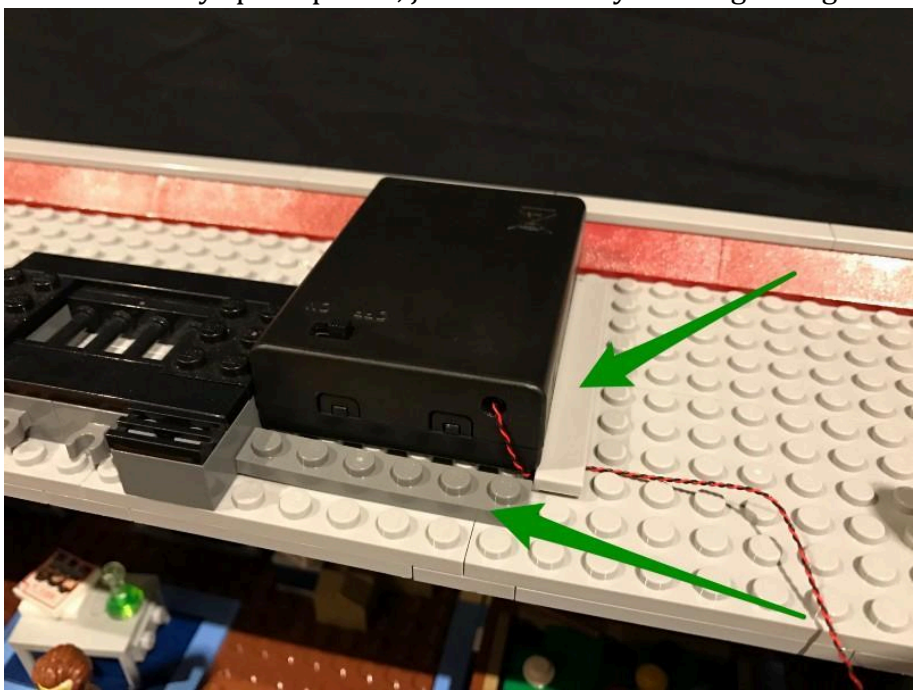


Connect the battery cable into the left port of the strip light we just installed.



48.) Secure the battery pack and cable using pieces as shown below. This will prevent the battery pack from moving around when you turn it on/off.

You can use any spare pieces, just ensure they are long enough.



This finally completes installation of the Ghostbusters Headquarters LED Lighting Kit.

Turn on and ENJOY!