Light My Bricks : LEGO Tower Bridge Lighting Kit

The following page is the instructions for the Light My Bricks LEGO Tower Bridge (10214) LED light kit.

To ensure a trouble-free installation of your light kit, please read and follow each step carefully.

> Please note: This page lists instructions for the LED light kit only.

. . .

Package contents:

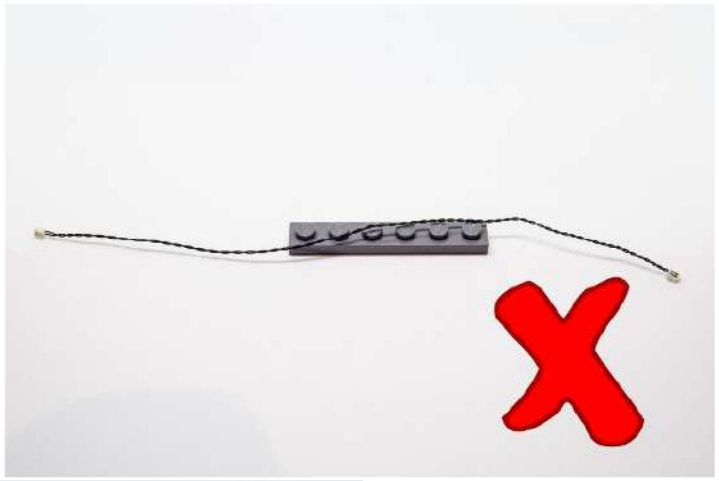
- 20x White Strip Lights
- 3x Blue Strip Lights
- 4x 6-Port Expansion Boards
- 4x 5cm Connecting Cables
- 18x 15cm Connecting Cables
- 7x 30cm Connecting Cables
- 8x Adhesive Squares
- 1x AA Battery Pack (requires 3x AA Batteries)
- 4x LEGO Plates 1x6

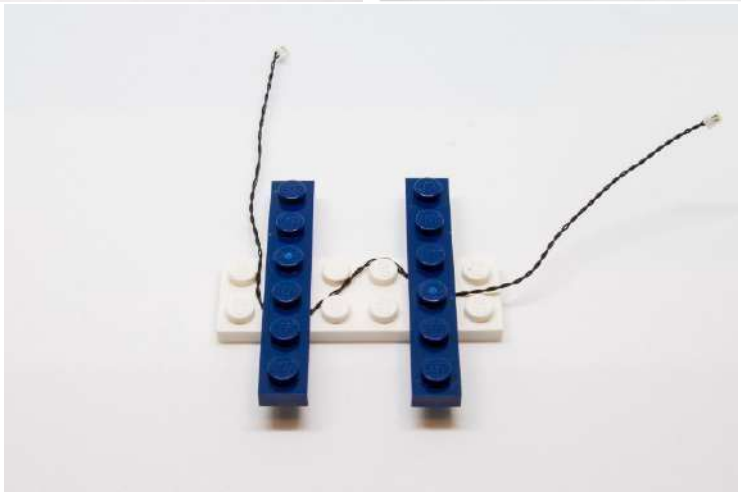
. . .

Important things to note:

Laying cables in between and underneath bricks

Cables can t in between and underneath LEGO® bricks, plates, and tiles providing they are laid correctly between the LEGO® studs. Do NOT forcefully join LEGO® together around cables; instead ensure they are laying comfortably in between each stud.

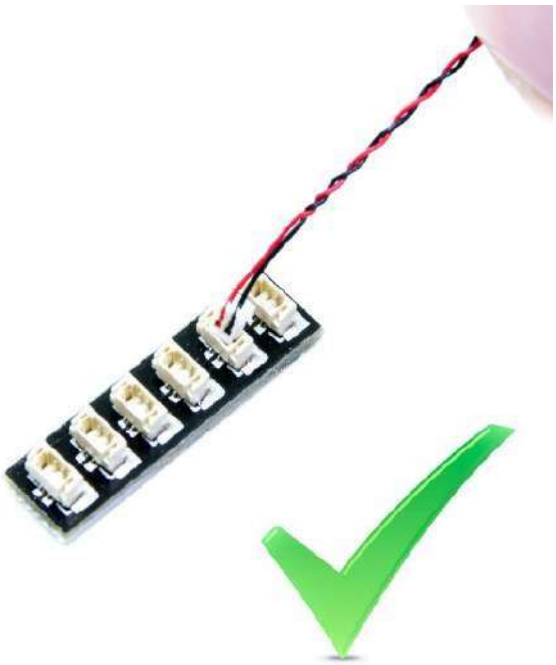


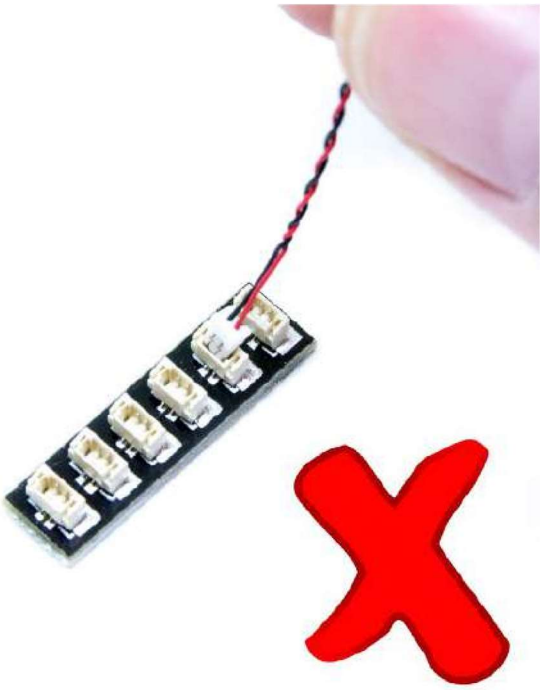


CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

Connecting cable connectors to Expansion Boards

Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered “=” symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered “=” symbol as you insert into the port. If a plug won’t t easily into a port connector, do not force it.

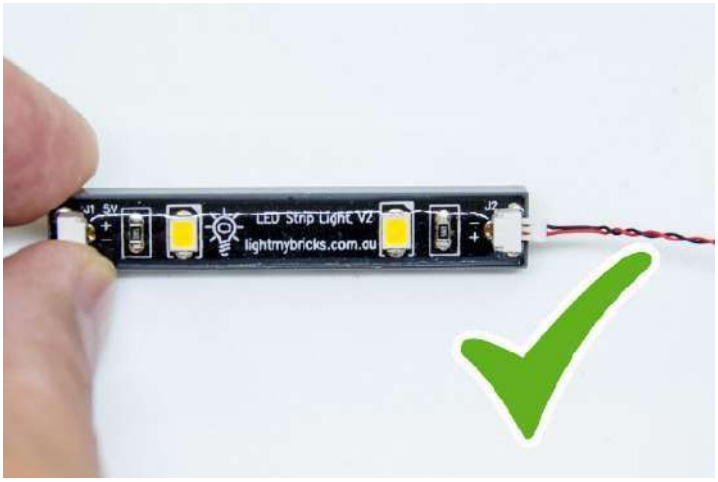


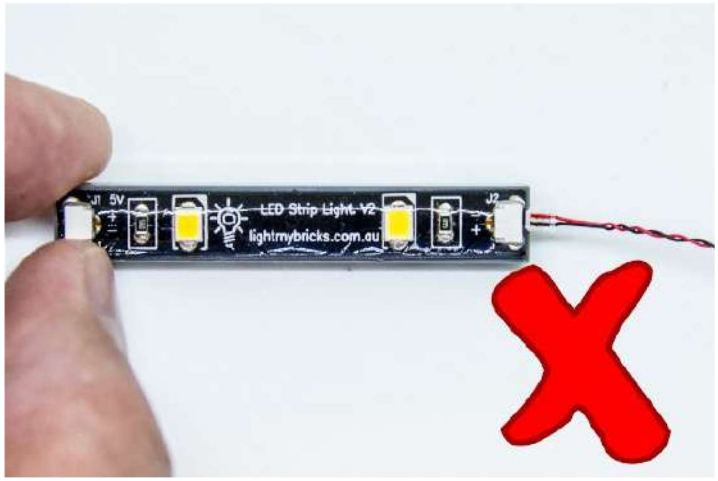


Incorrectly inserting the connector can can result in bent pins inside the port or possible overheating of the expansion board when connected.

Connecting cable connectors to Strip Lights

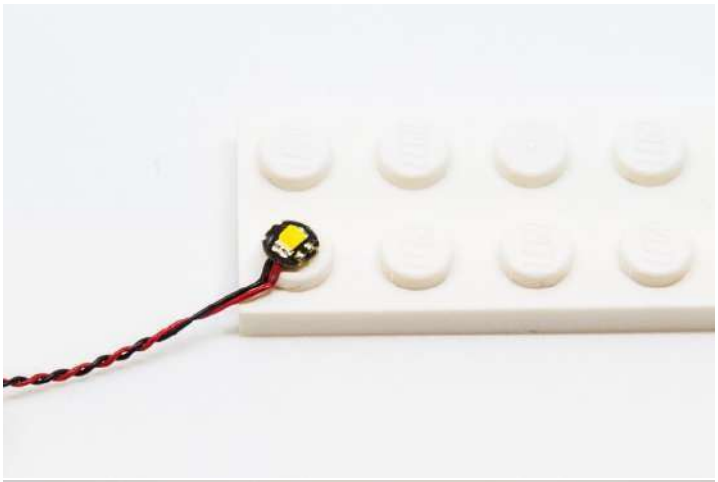
Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't t easily into a port connector, don't force it. Doing so will damage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

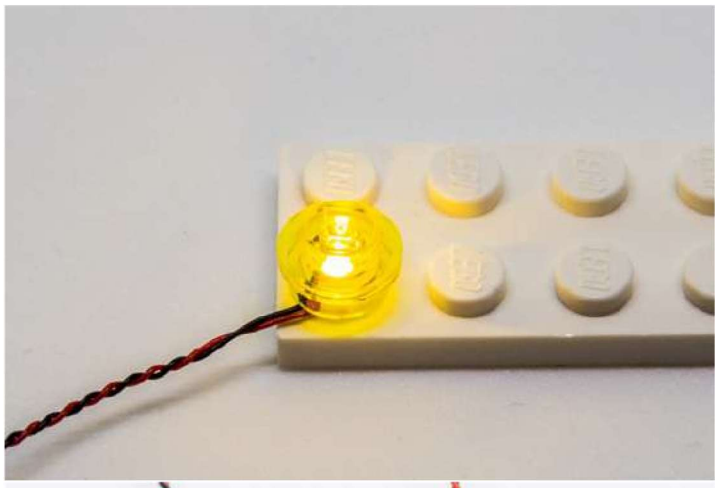


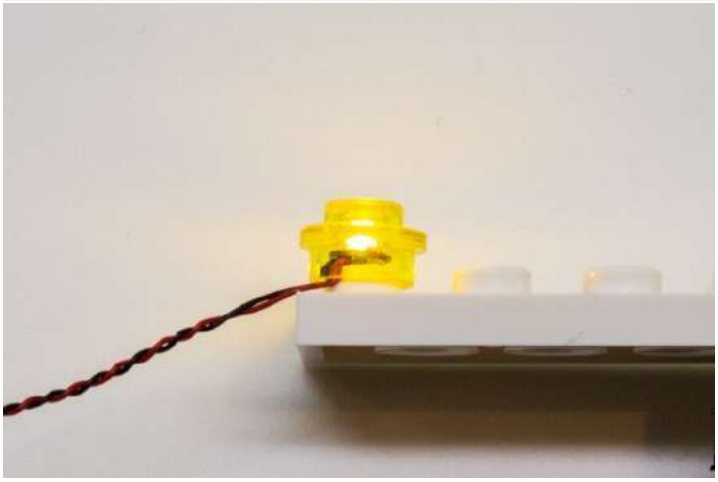


Installing Bit Lights under LEGO® bricks and plates.

When installing Bit Lights under LEGO® pieces, ensure they are placed the correct way up (Yellow LED component exposed). You can either place them directly on top of LEGO® studs or in between.





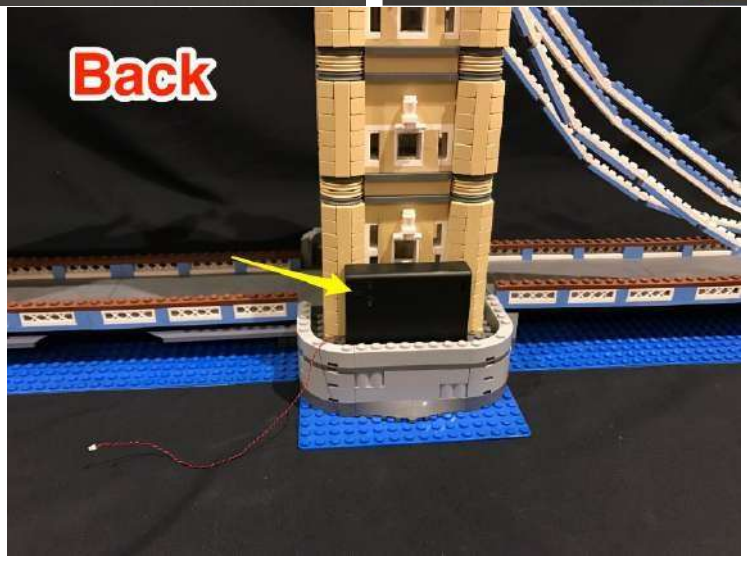


. . .

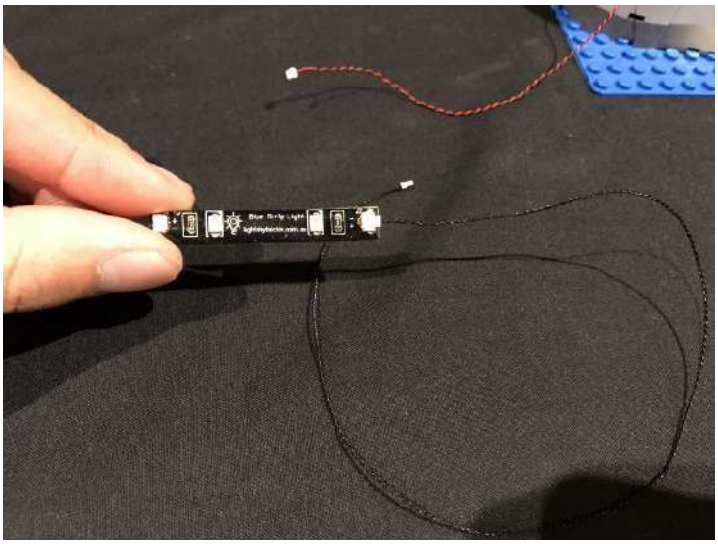
OK, Let's Begin!

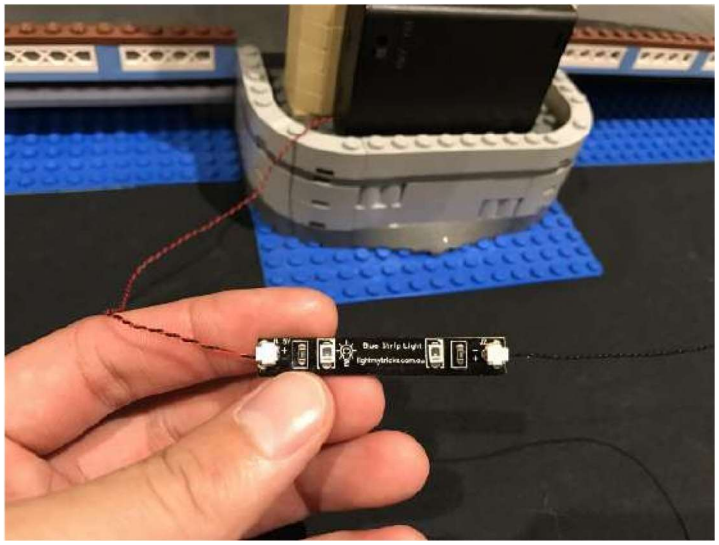
Instructions for installing this kit

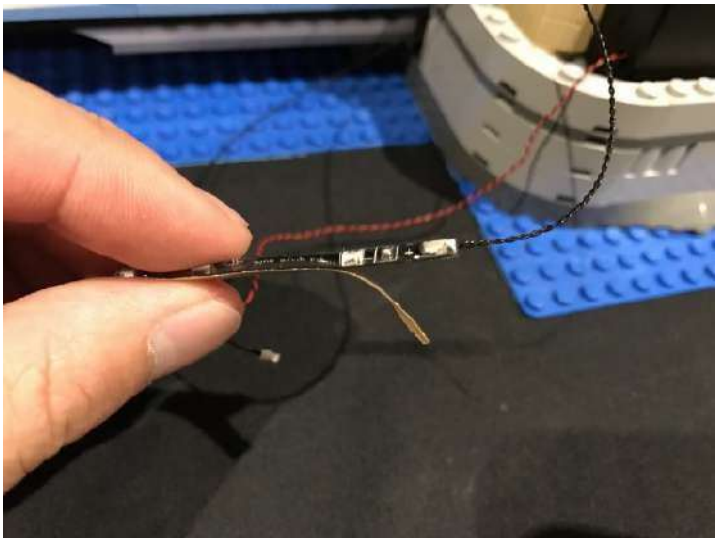
1.) We will install lights to the left section of the Tower Bridge startingwith the middle bridge section. First, turn the Tower Bridge to the other side and then take the AA Battery Pack and insert 3x AA batteries before placing it on the back in the below position. Ensure the cable is facing down and the battery switch is accessible.

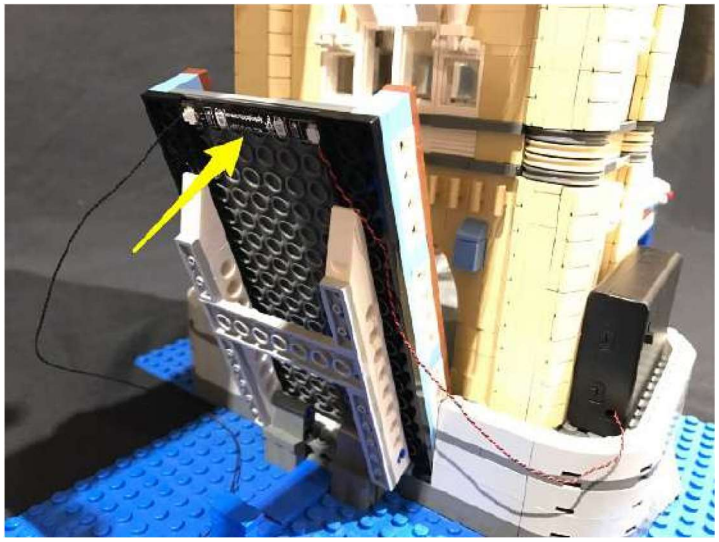


Take a Blue Strip Light and connect a 30cm Connecting Cable into the right port. Connect the Battery Pack cable into the left port and then peel o the adhesive backing to allow you to stick this strip light underneath the bridge as per below:

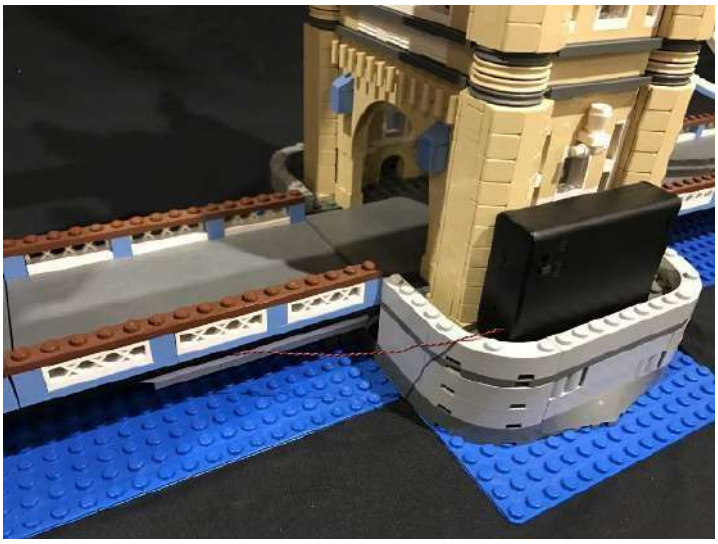




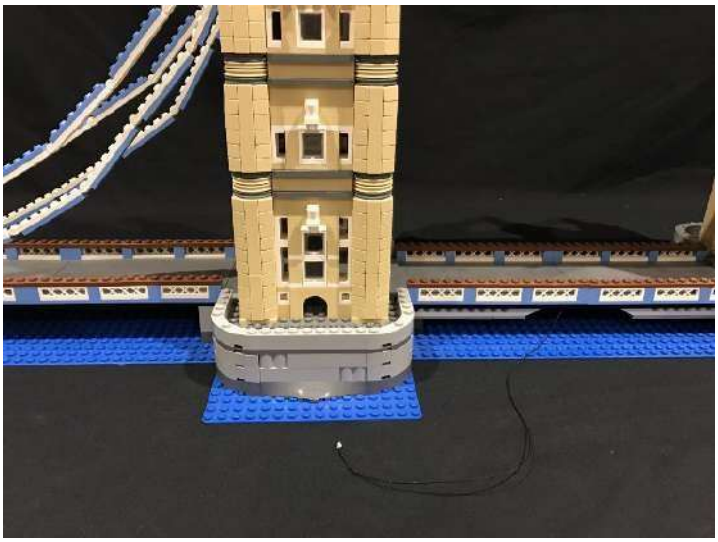


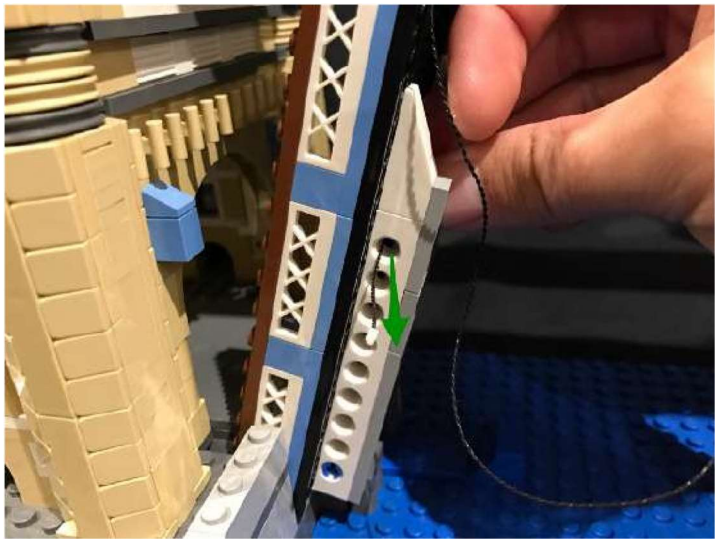


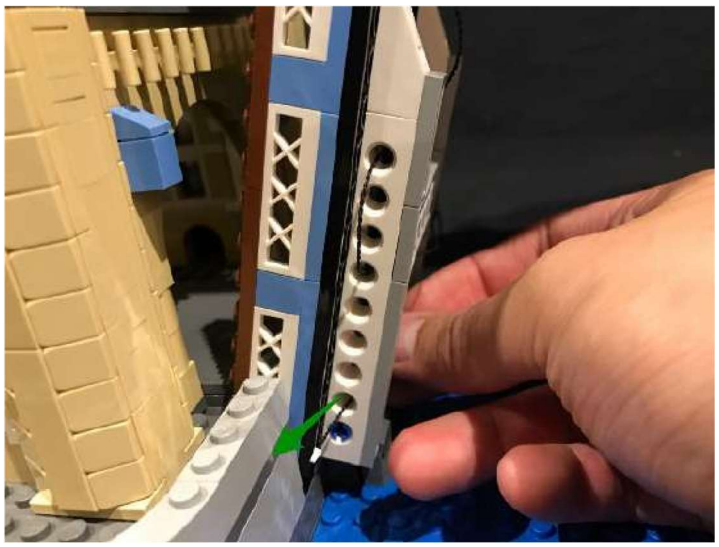
Push down the bridge gate to original position and then secure/hide the battery cable by removing the 1x4 brick, laying the cable in between studs and then reconnecting it over the top.



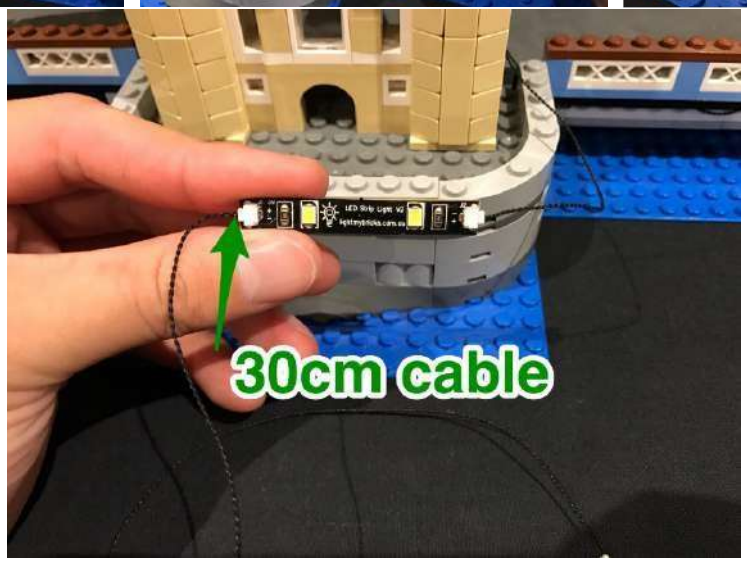
2.) Turn the Tower Bridge back to the front, then take the 30cm cablefrom the blue strip light and thread through the holes of the white technic brick underneath to eliminate excess cable.



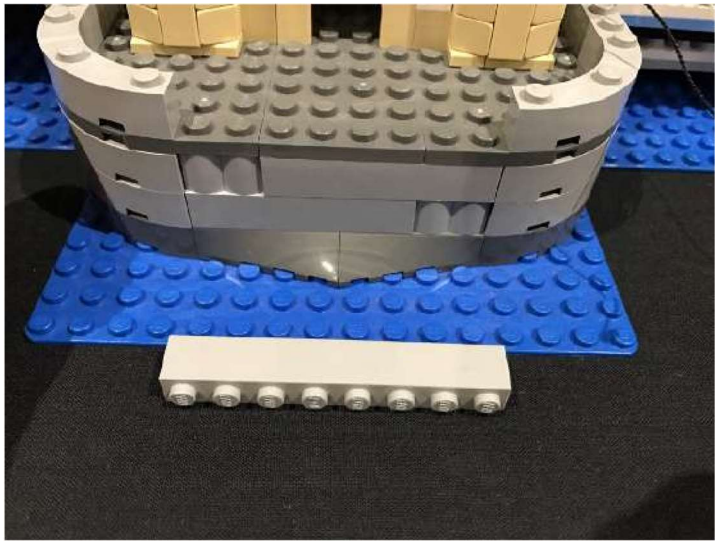
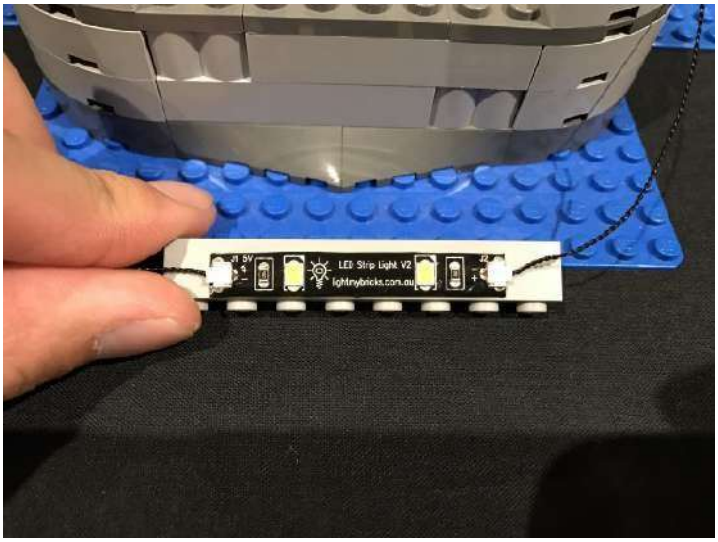


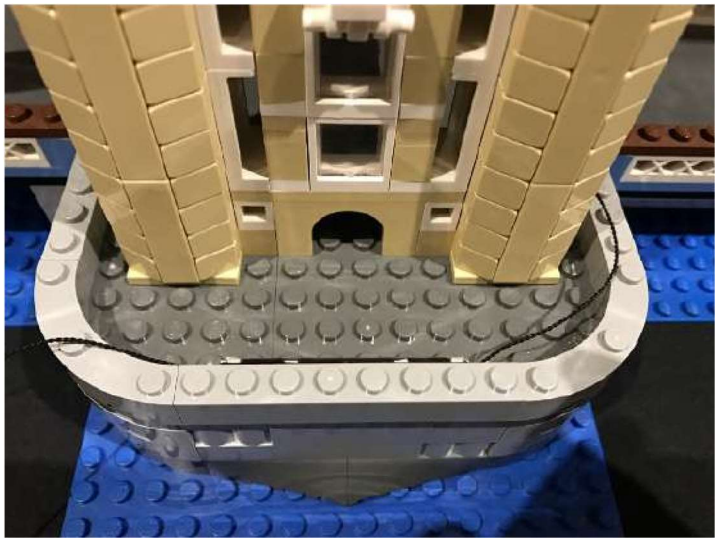


3.) Secure the cable behind the grey 1x4 brick and connect the cable tothe right port of a White Strip Light. Connect another 30cm Connecting Cable to the left port.

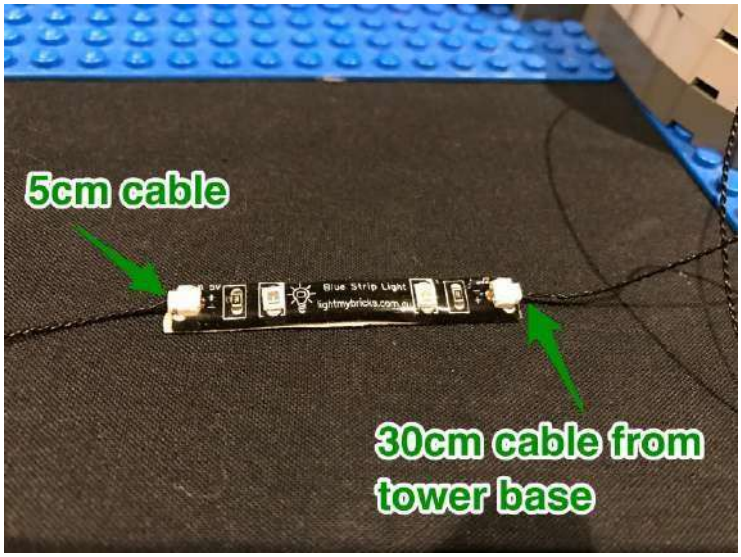


Remove the 1x8 brick from the front of the tower base and then stick the White Strip Light on to the inside of the brick as per below. Then reconnect it to the base.

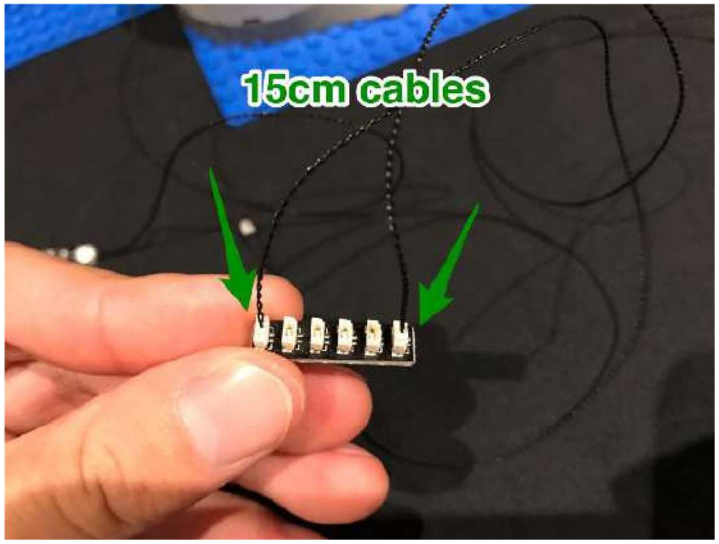





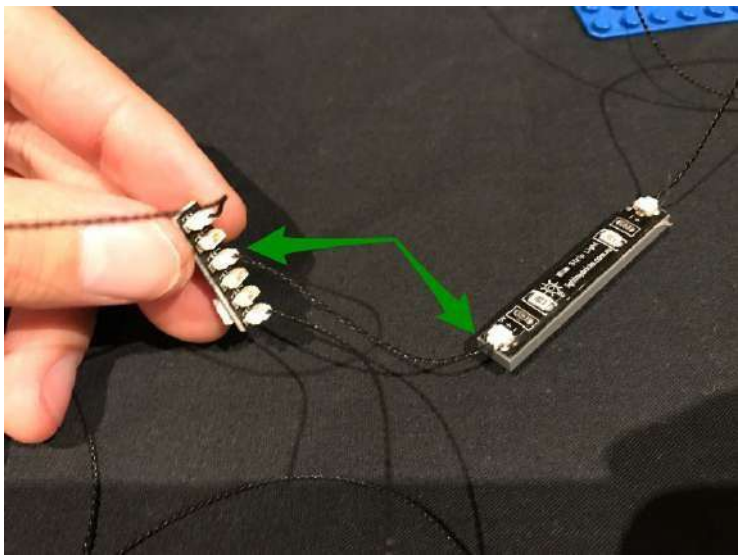
4.) Take another Blue Strip Light and then connect the 30cm cable fromthe white strip light to the right port. Take a 5cm Connecting Cable and connect it to the left port of the Blue Strip Light



Take a 6-Port Expansion Board and connect 2x 15cm Connecting Cables to the ports on each far side.

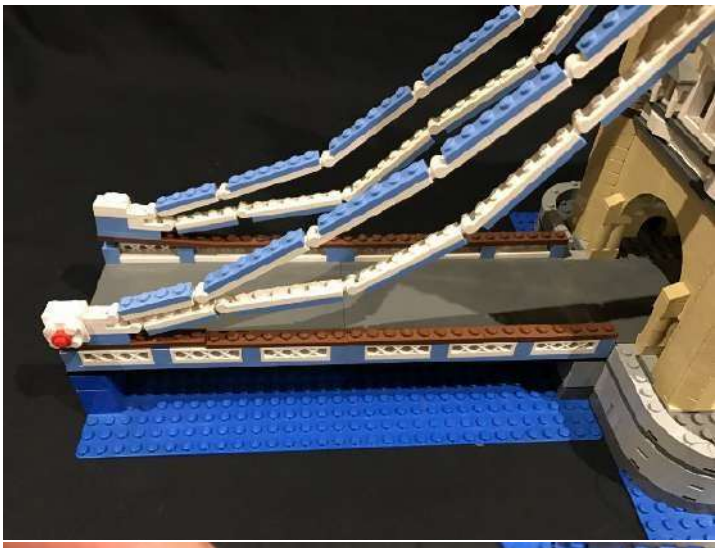


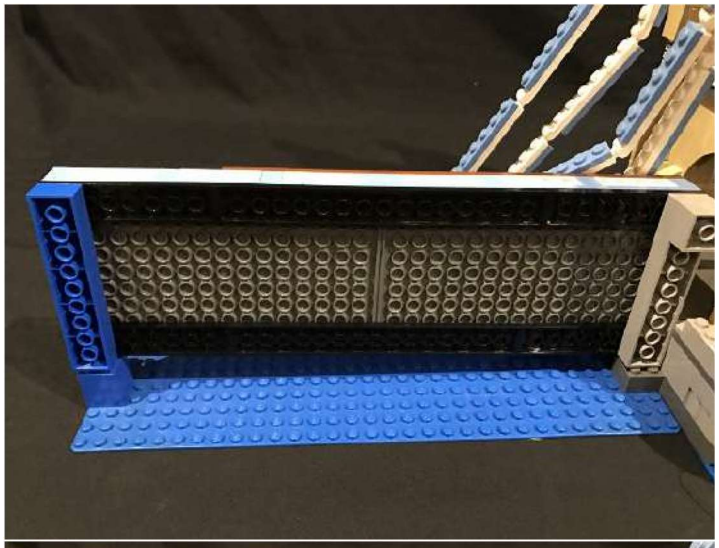
Connect the other end of the 5cm from the blue strip light to one of the ports on the expansion board.

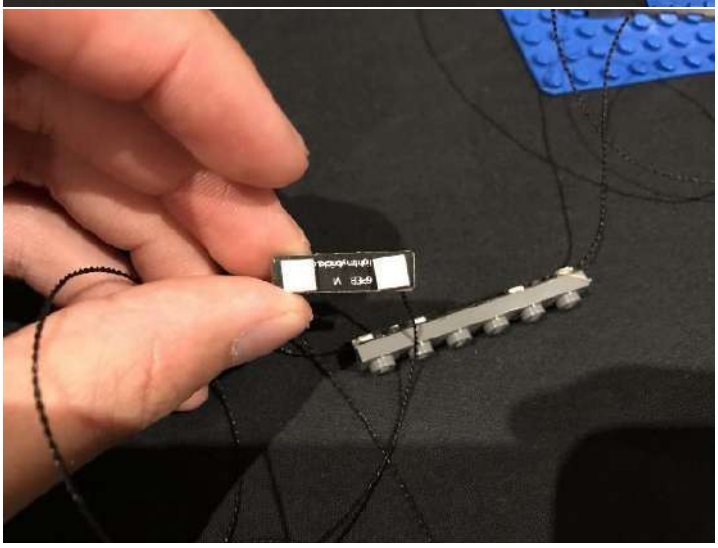


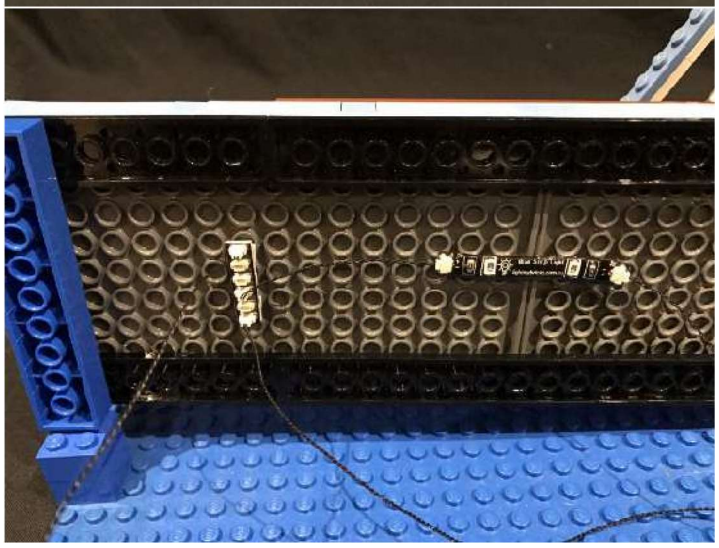
NB: An extra LEGO 1x6 plate is only used in this image to allow for easy mounting of the strip light. The plate used in this image is not included in this set as the strip light can be stuck using the adhesive backing.

5.) Remove the base of the bridge road on the left side and then turnover to allow us to stick the Blue Strip Light and expansion board underneath to the following position (using 2x adhesive squares).

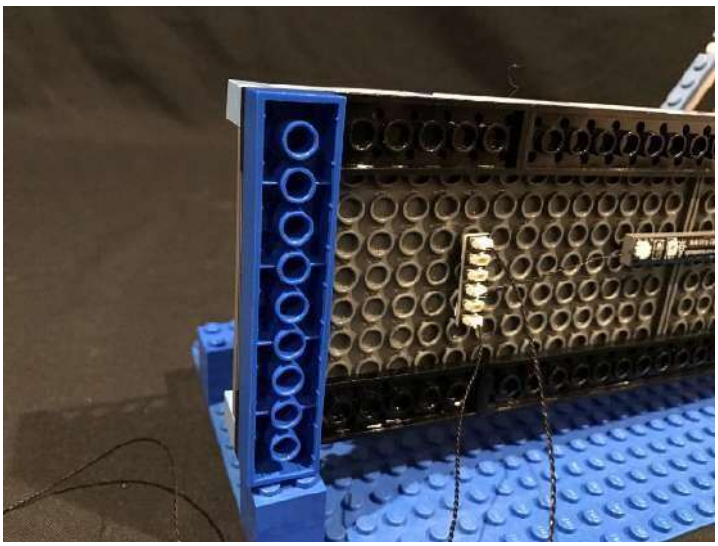


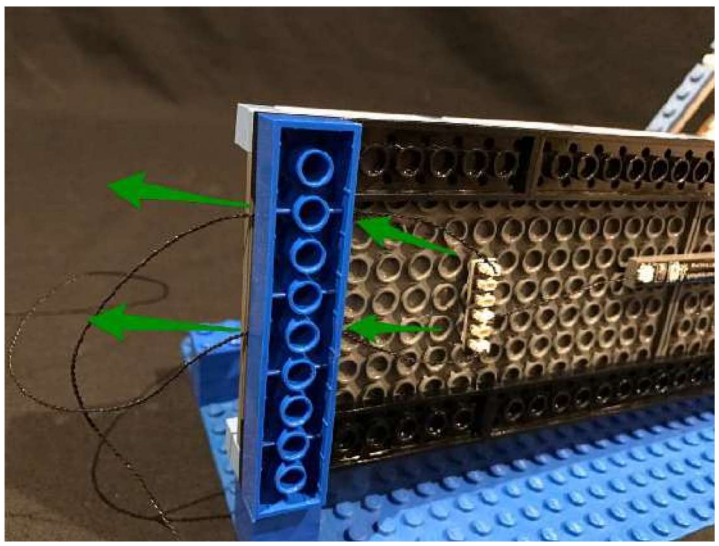




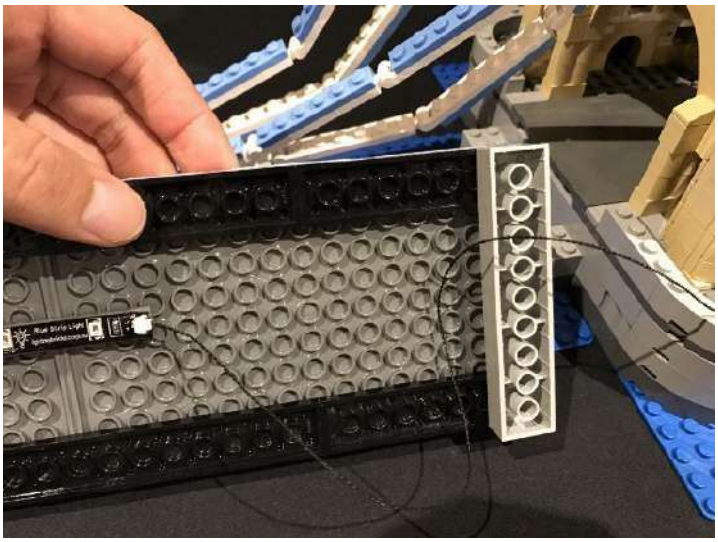


Thread the two 15cm cables through the small gap between the blue brick 2x10 and the road plate.



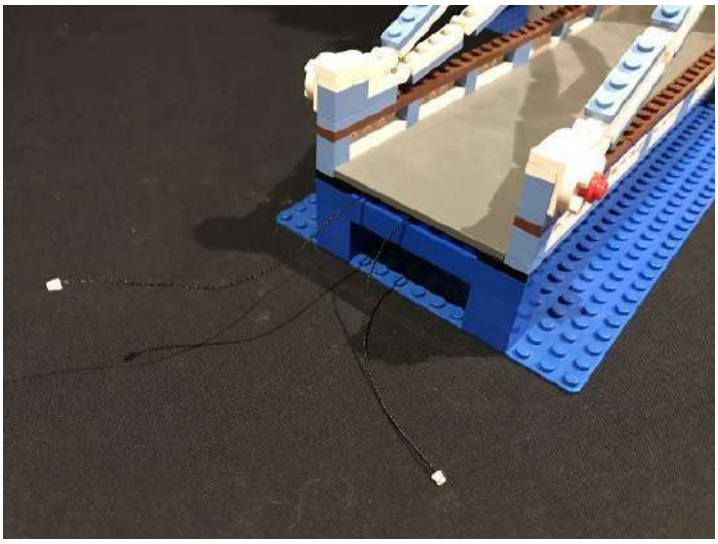


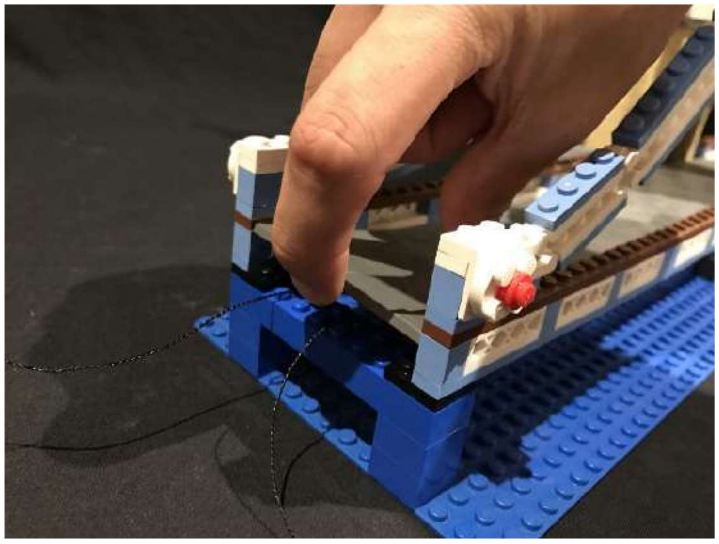
Reconnect the bridge road section back to the base plate ensuring cables are well hidden underneath.

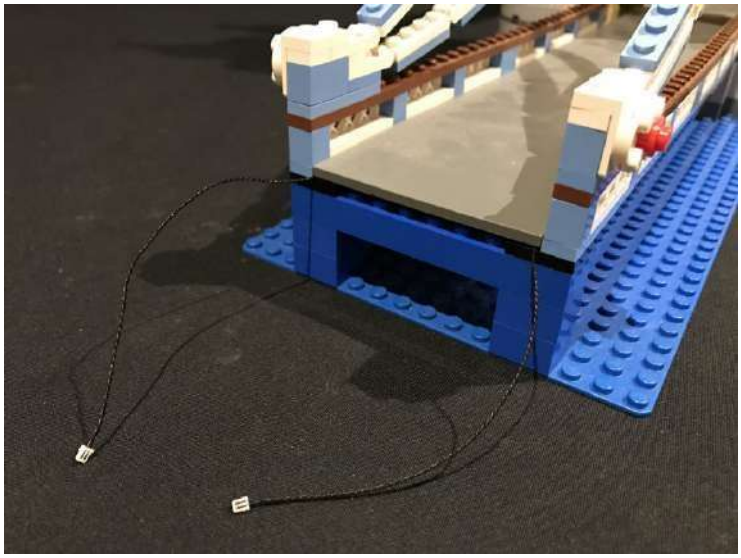


Turn on the battery pack to verify all the strip lights installed so far are working OK.

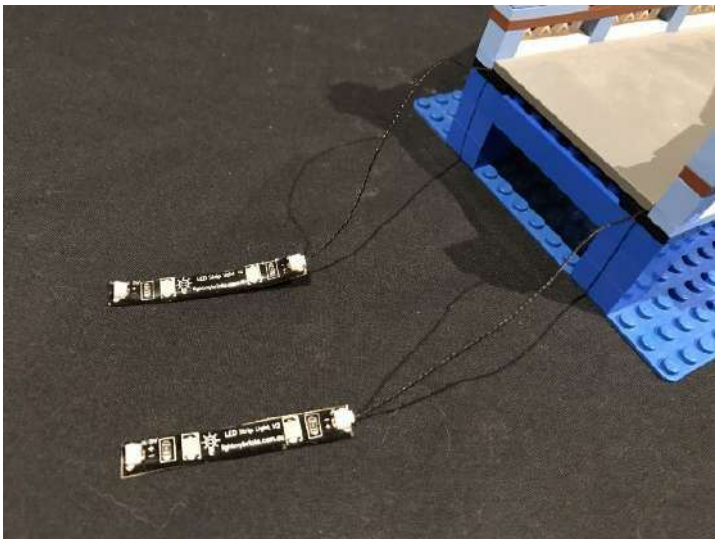
6.) From the left side of the bridge, secure the two 15cm cables byconnecting them underneath the road plate as per below:



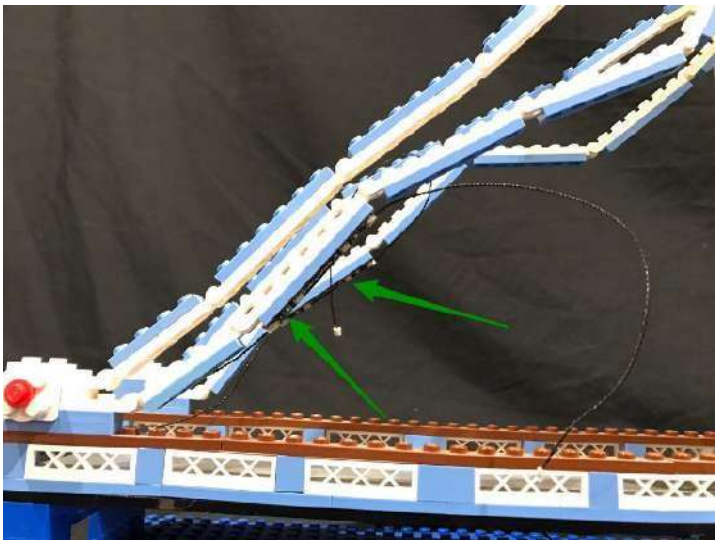


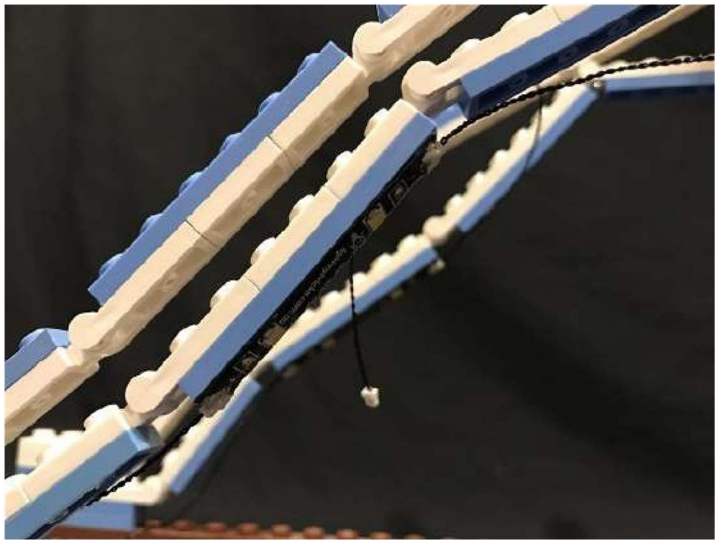


7.) Take 2x White Strip Lights and connect the 15cm cables from the bridge to each strip light port. Connect another 15cm Connecting Cable to the other port of each white strip light.

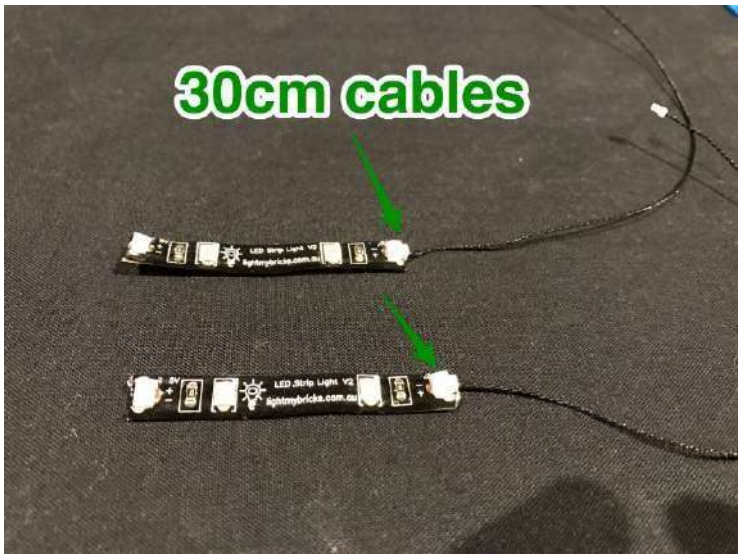


Stick the strip lights to the second lot of blue plates from the left (one for each side)

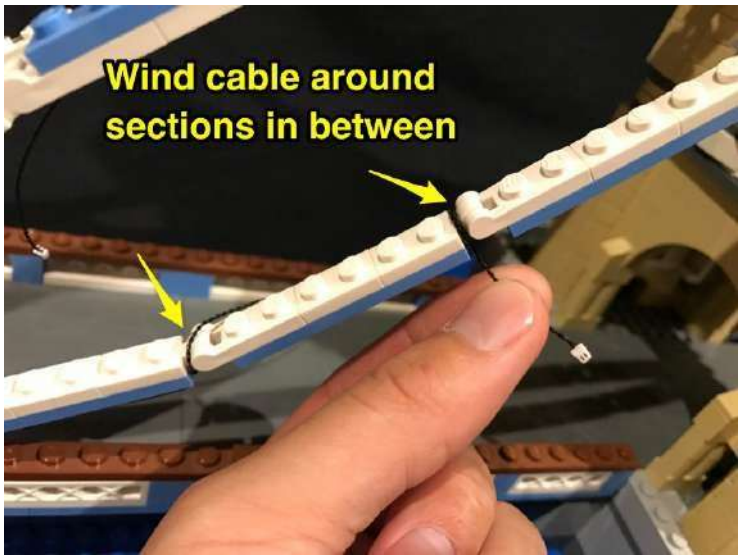




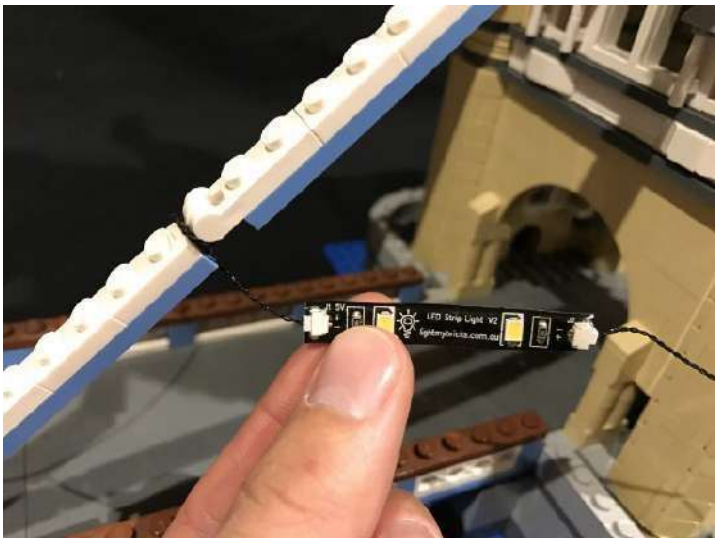
8.) Take another 2x White Strip Lights and connect a 30cm Connecting Cable to each right port.

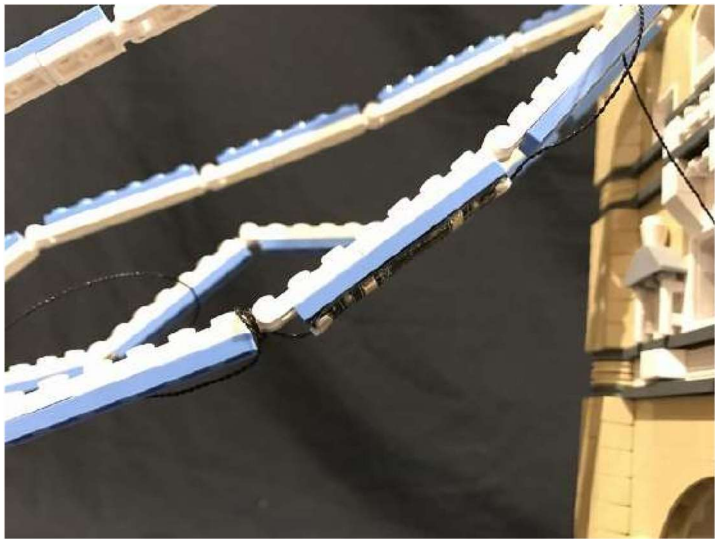


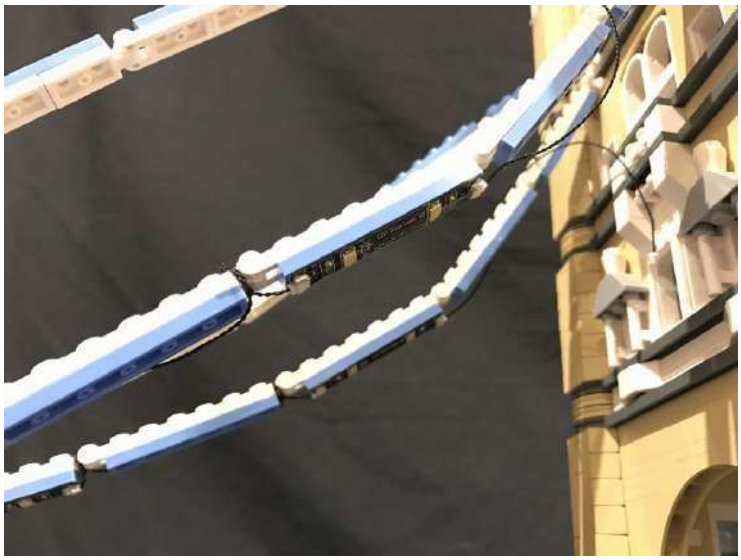
Before we stick these 2 strip lights, we need to eliminate excess cable from the 15cm cables from the previous strip lights. To do this, wind the cables around the LEGO plates as shown below.



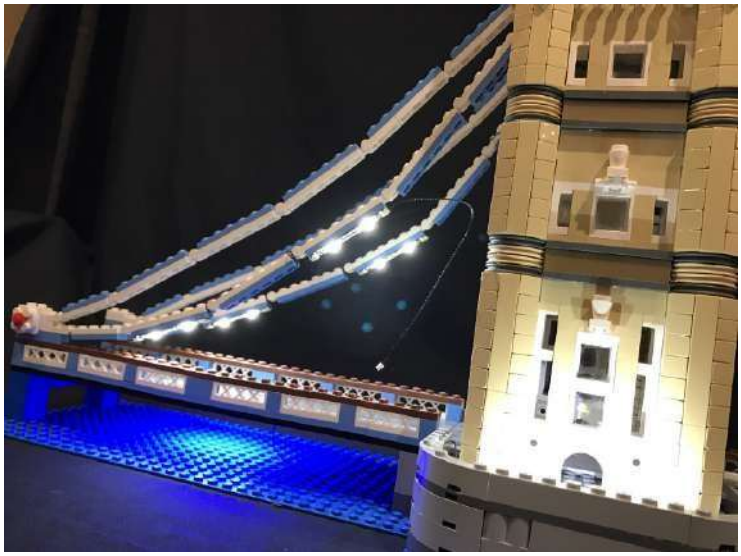
Once you have eliminated as much cable as possible, connect each cable to the second set of white strip lights and then stick the strip lights underneath the 4th lot of blue plates across from the left.



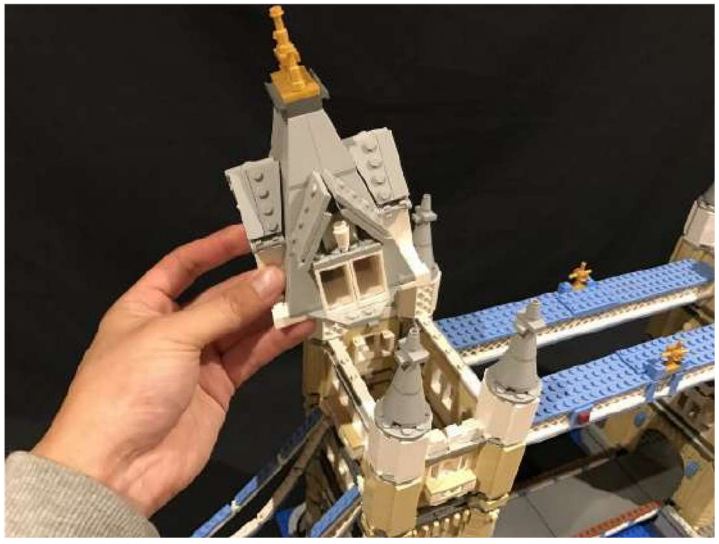


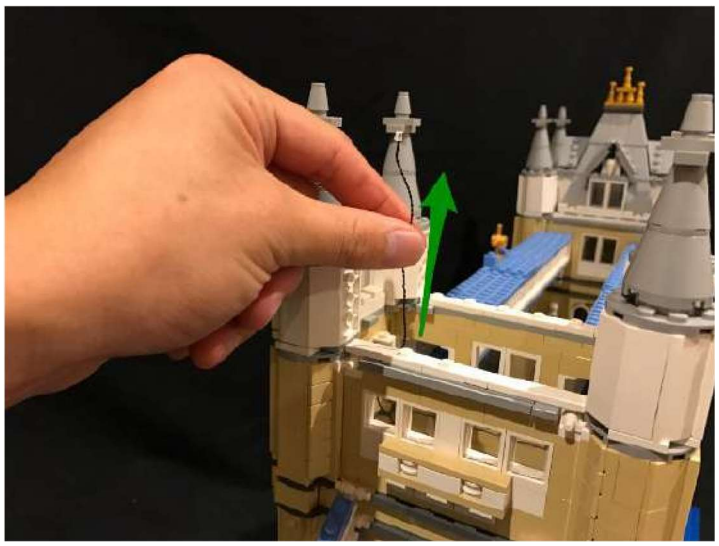


Turn on the battery pack to verify all is working OK.

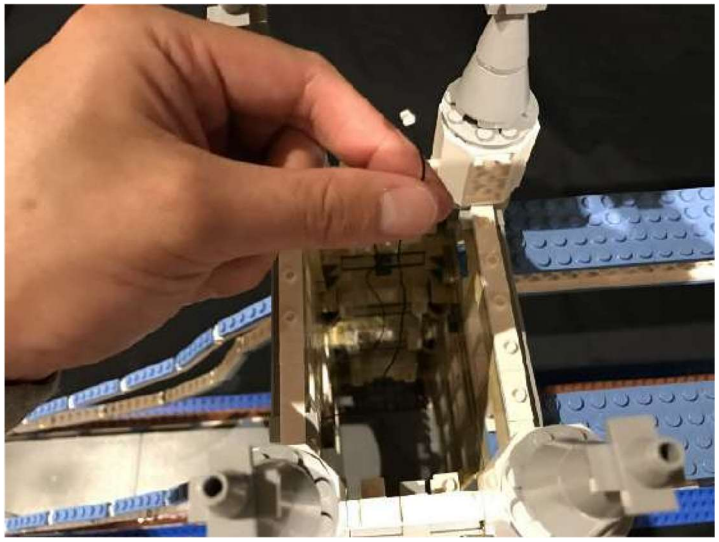


9.) We will now move onto lighting the left tower. First remove the topsection and then thread the other end of each of the 30cm cables from below through the spacing above each arch window frame. Pull the cable up from the inside of the tower.

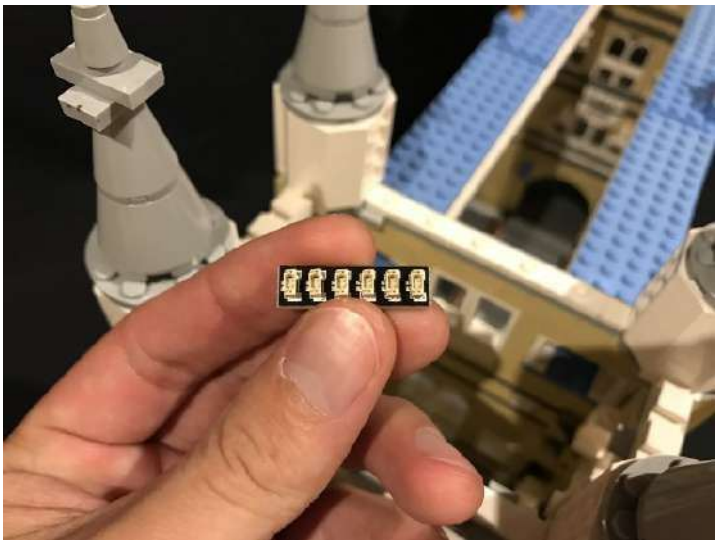
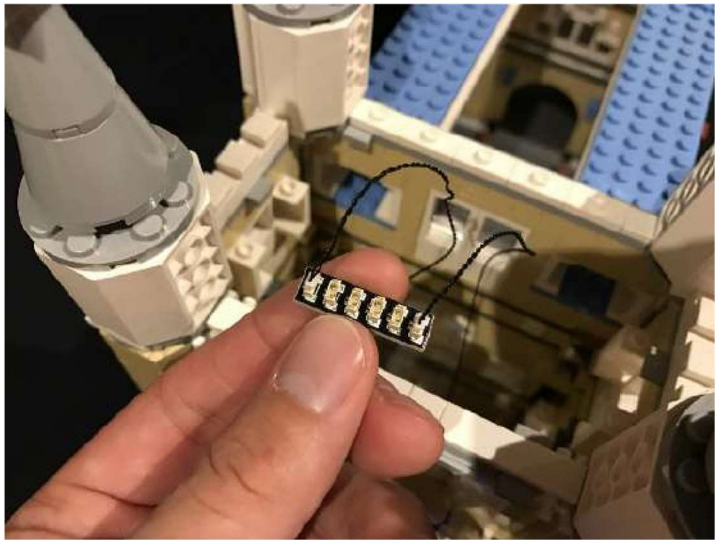


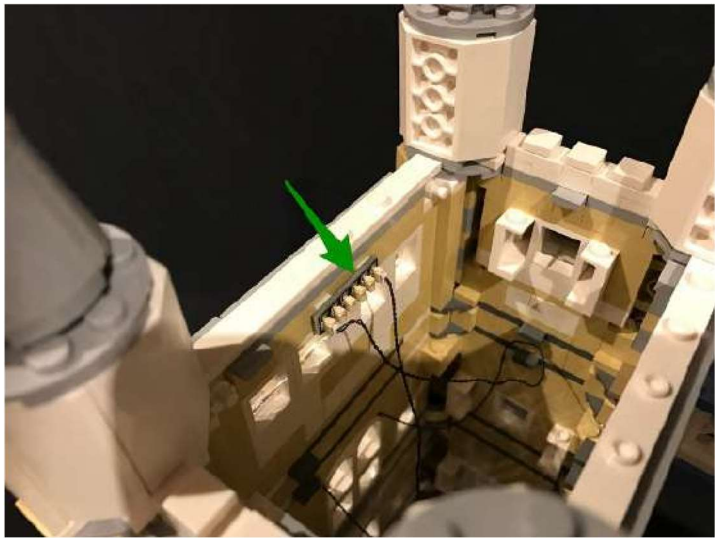


Repeat this step to thread the other 30cm cable through.

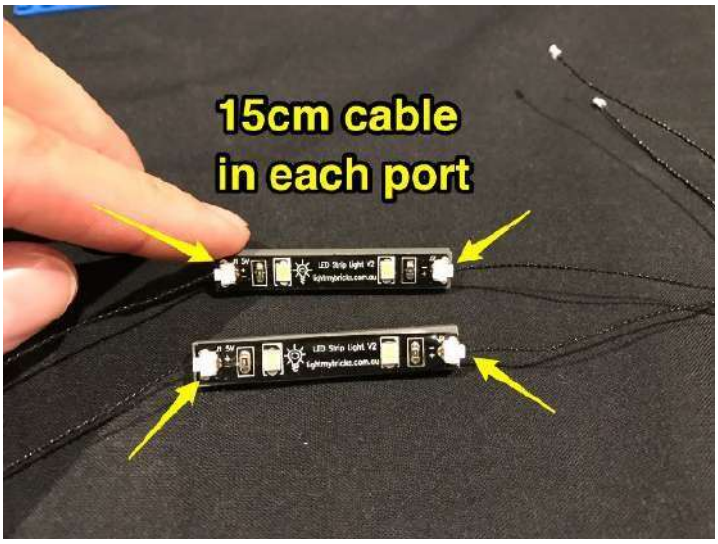


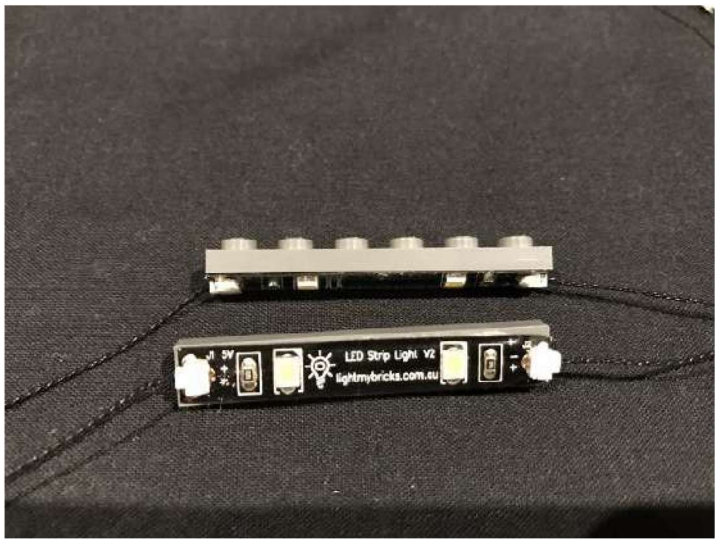
10.) Take a 6-Port Expansion Board and then connect each 30cm cable we threaded through to the side ports. Mount the expansion board to the inside wall of the tower using another 2x adhesive squares.

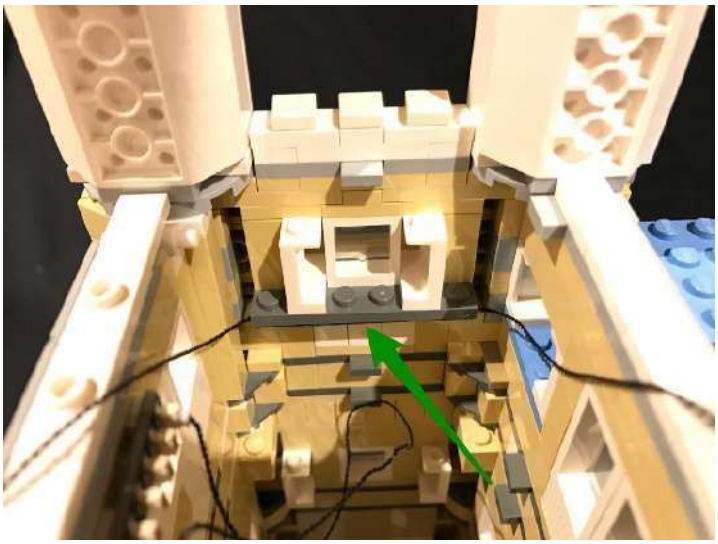


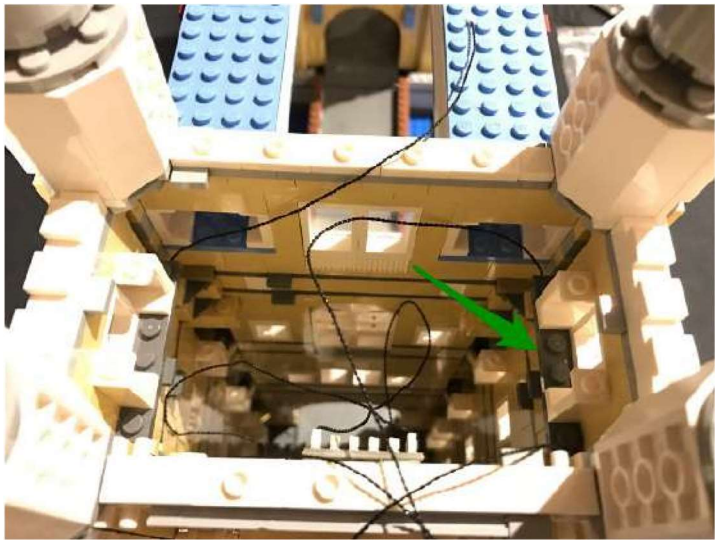
11.) Take another 2x White Strip Lights and then stick them to provided LEGO 1x6 Plates. Connect a 15cm Connecting Cable to each of the ports of the two strip lights (4x 15cm cables in total).



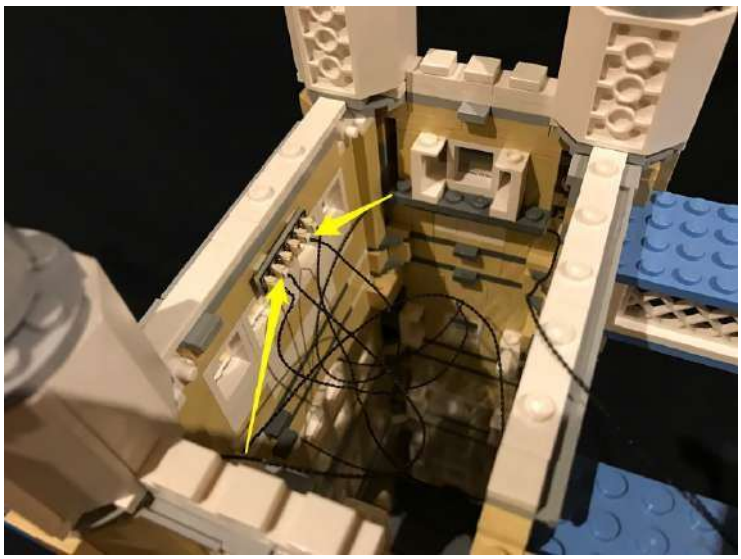


Connect the strip lights to each side of the inside of the tower in below positions.

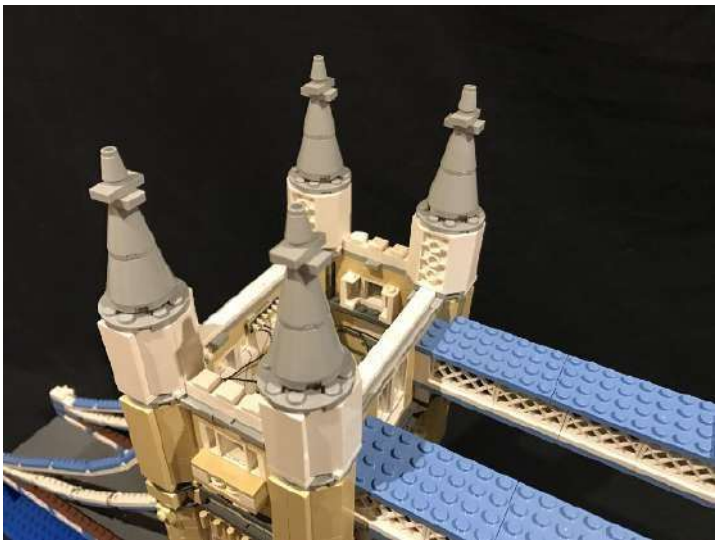
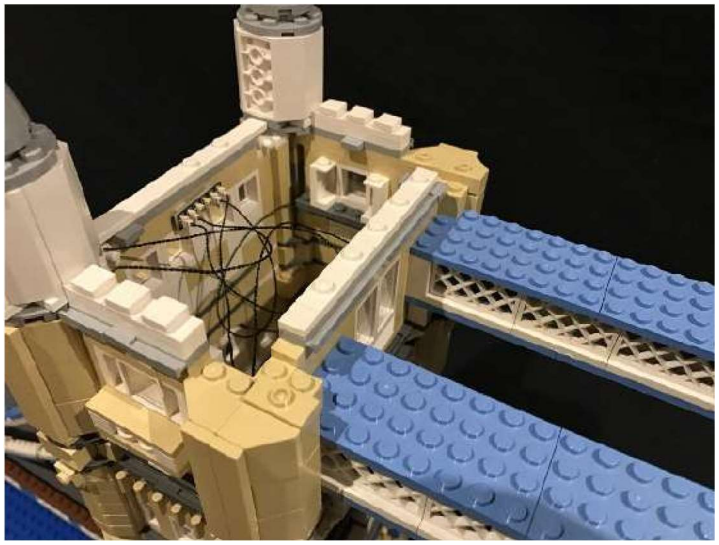
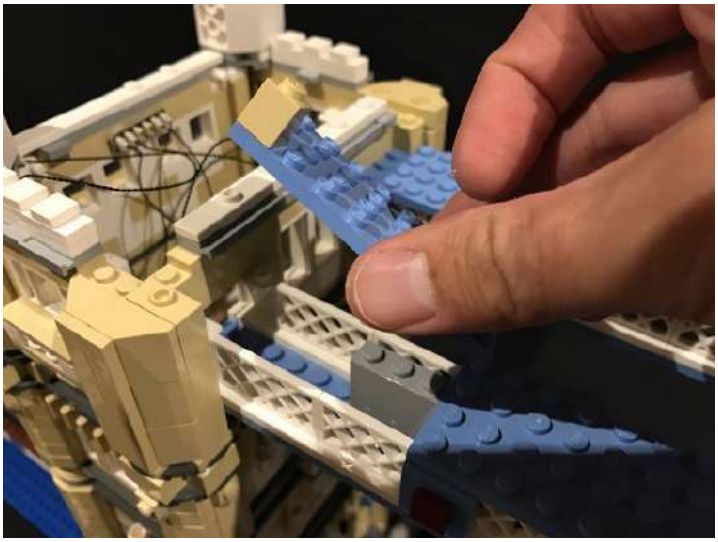
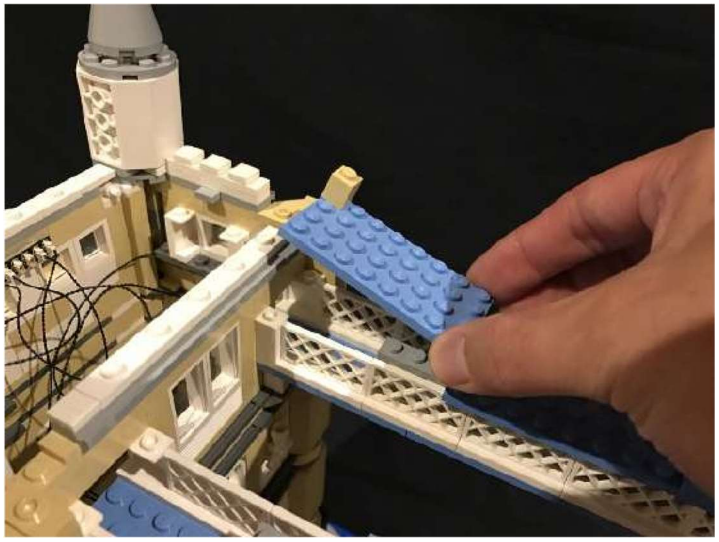




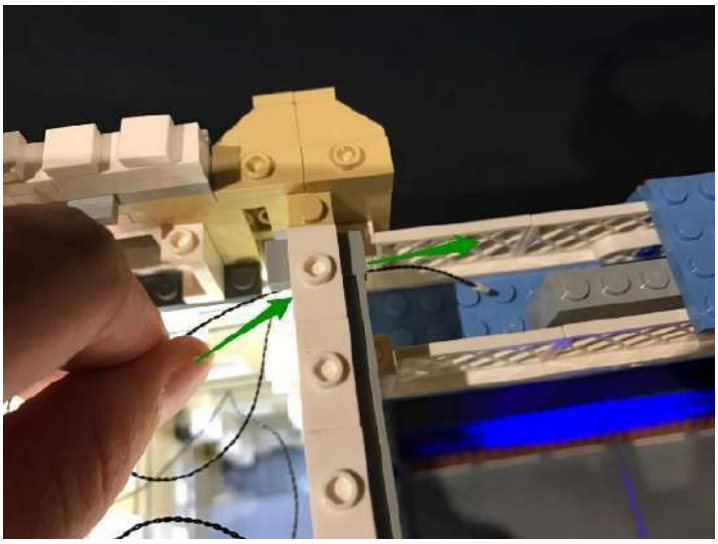
Take one cable from each of the strip lights we just installed and connect them to the 6-port expansion board we mounted earlier.

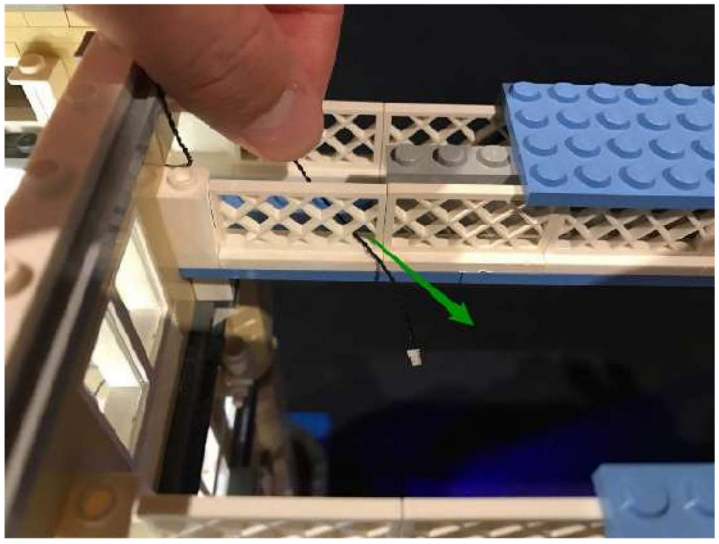


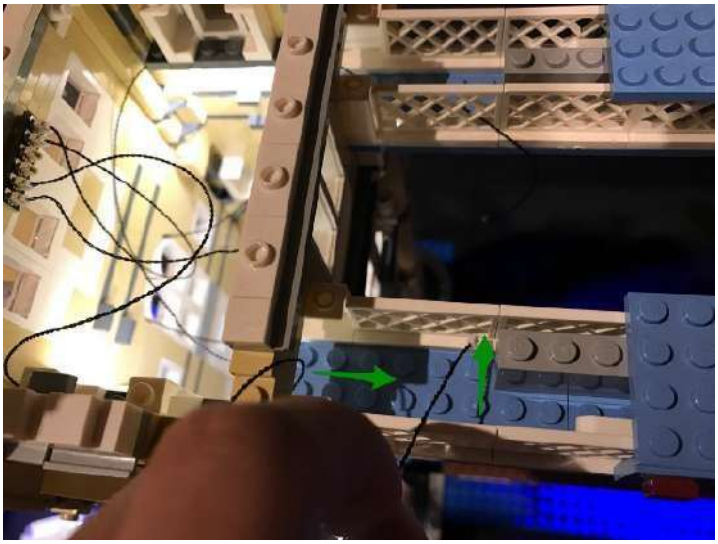
12.) Remove the following 2 corner sections as per below, followed bythe blue plate sections on each side.

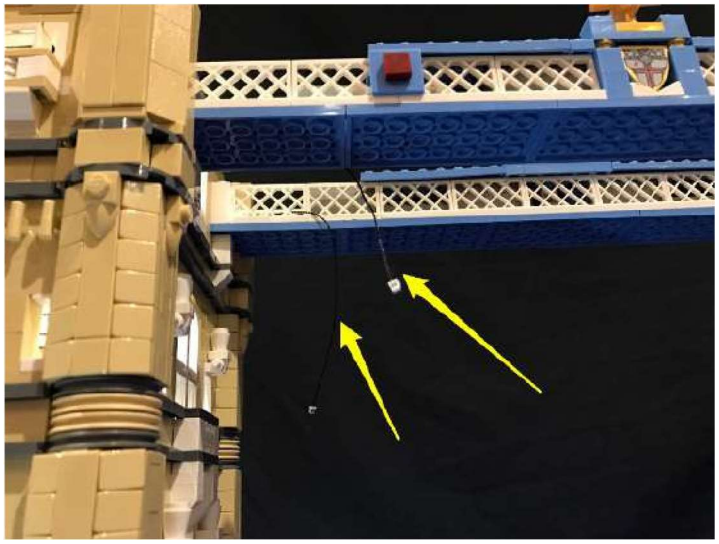





Thread the spare cable from each of the strip lights through the spacing on each side, then thread them through the gaps on one of the gate pieces. Use below images as a guide.

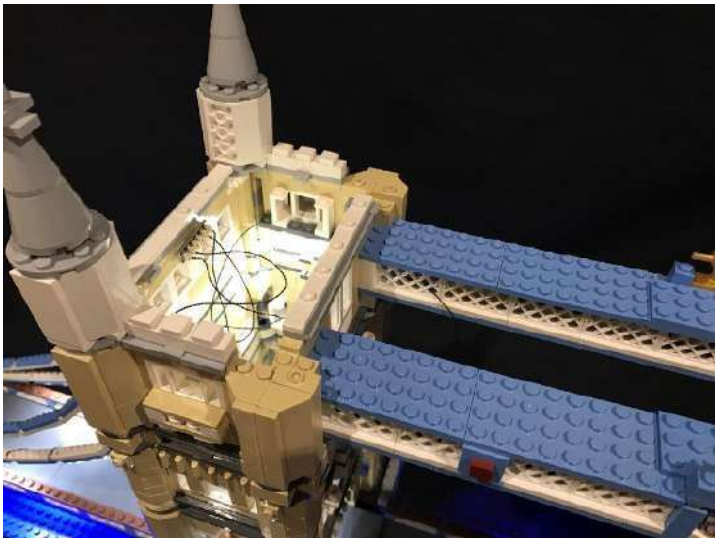




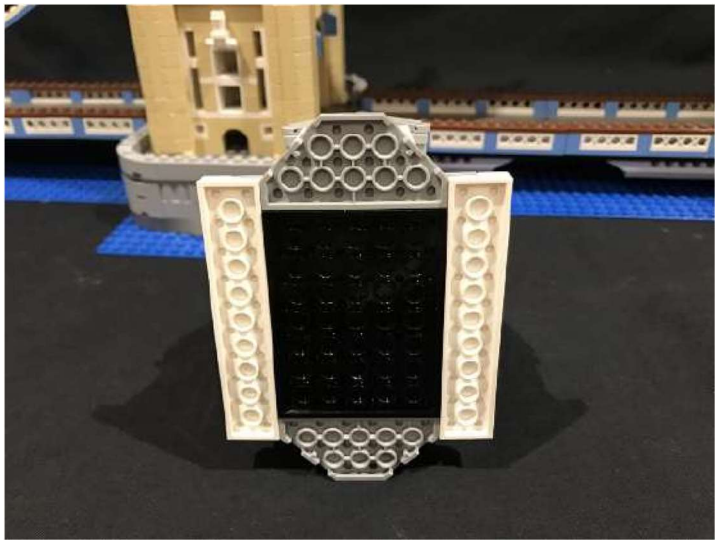




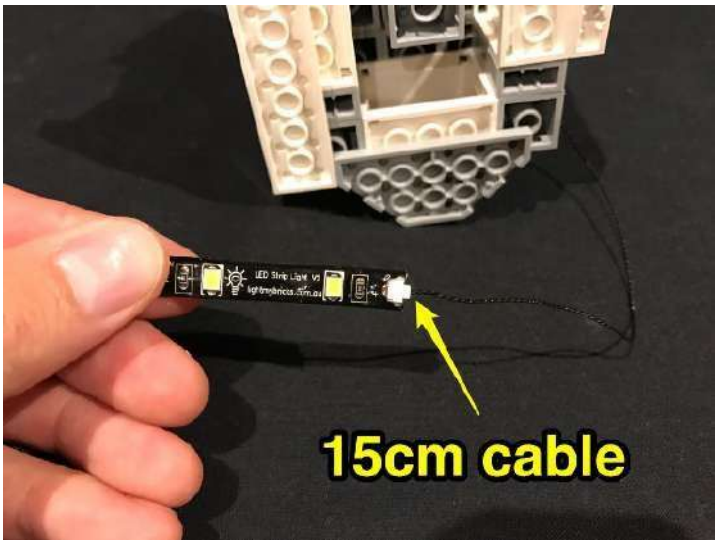
Once the cables are threaded through, reconnect the LEGO pieces we removed earlier.

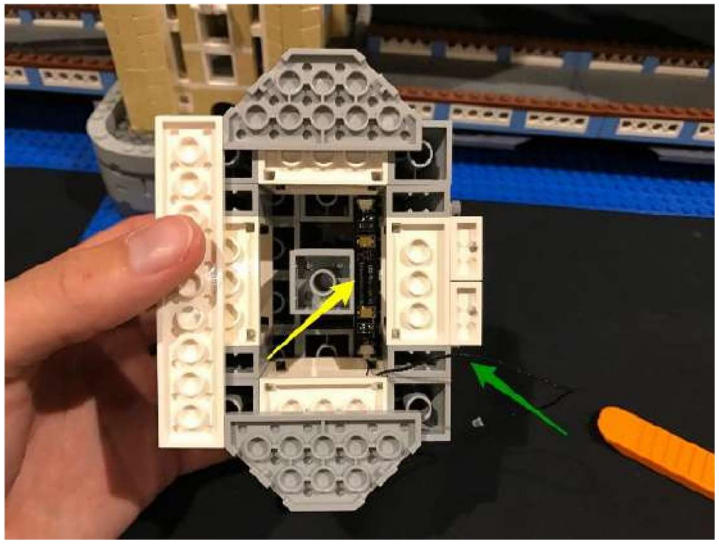


13.) Take the top section of the tower we removed earlier and then turnover to remove white and black plates underneath.

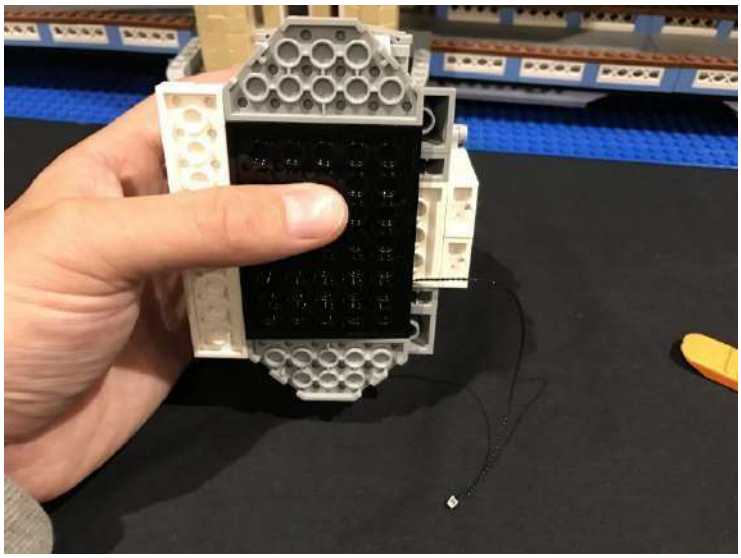


Take a White Strip Light and connect a 15cm Connecting Cable to the right port. Stick the strip light to the roof of this section in the exact position as per below, ensuring the cable is facing down.

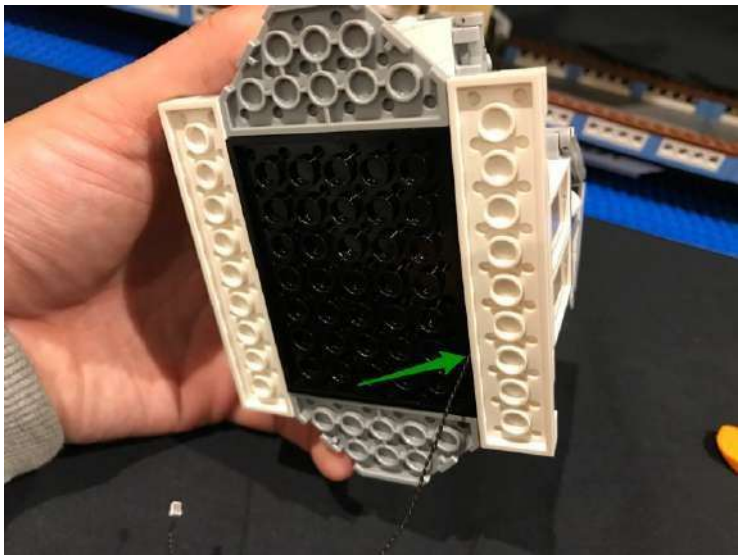




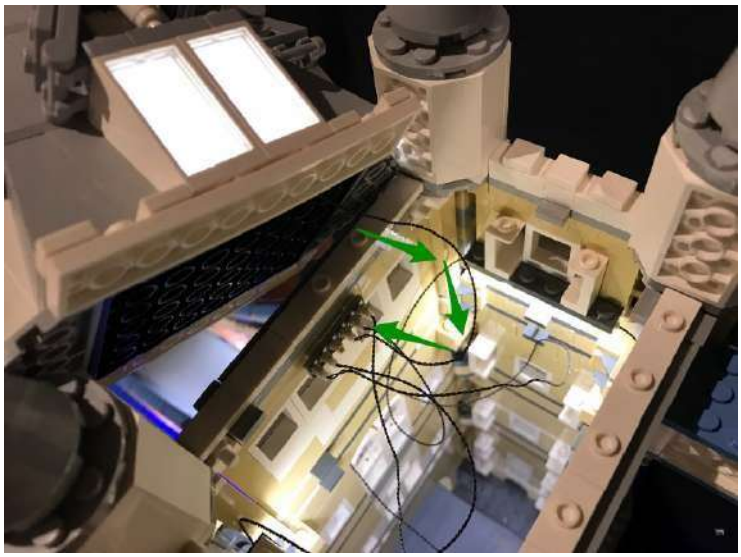
Pull the cable towards the right and then reconnect the black plate.



Reconnect the white plate ensuring the cable is in between black and white plates as shown below.

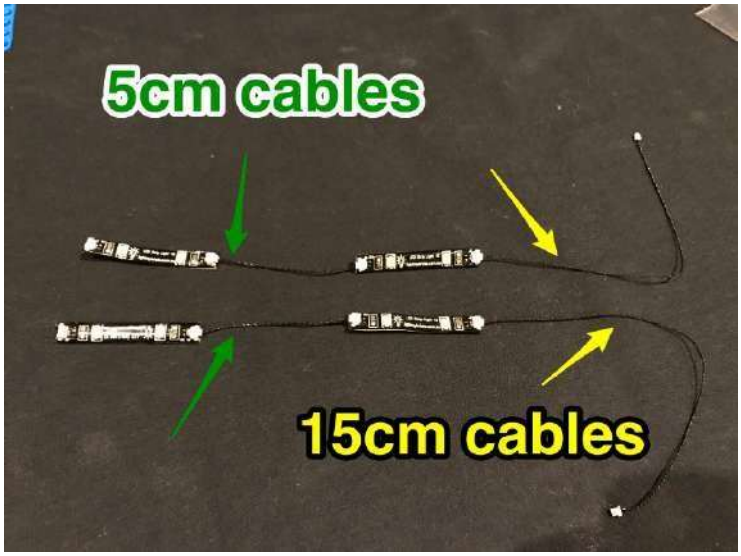


Take the top section of the tower and then connect the other end of the 15cm cable to one of the ports on the expansion board. Then reconnect this section on top of the tower and secure in place.

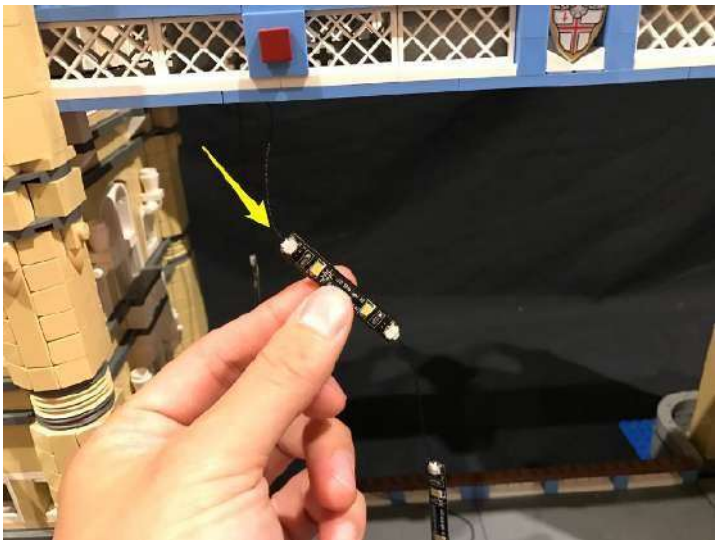


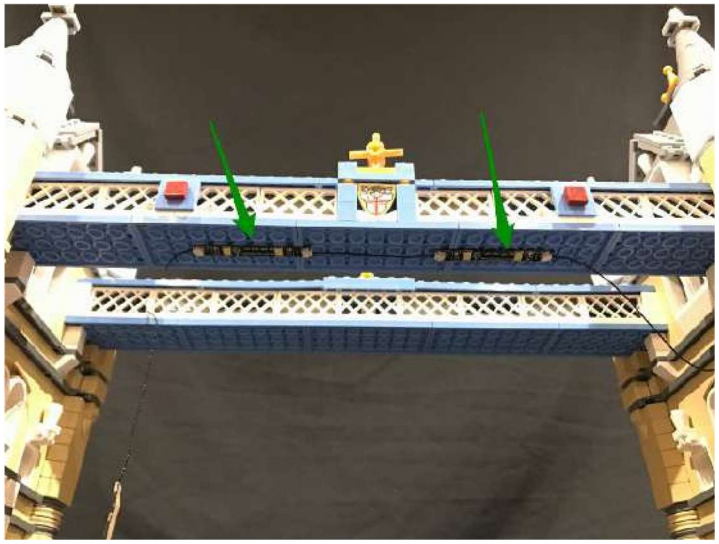
Turn on the battery pack and ensure all is working OK

14.) Take 4x White Strip Lights and then connect a 5cm Connecting Cable between two of them as well as a 15cm Connecting cable to each side as per below.

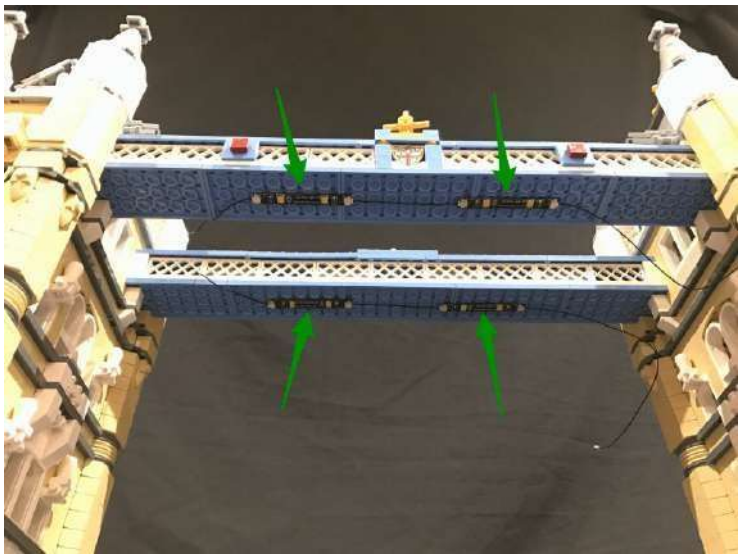


Locate one of the cables from the bridge and then connect this cable to the spare port on one set of strip lights. Stick this set of strip lights under the bridge in the below position.



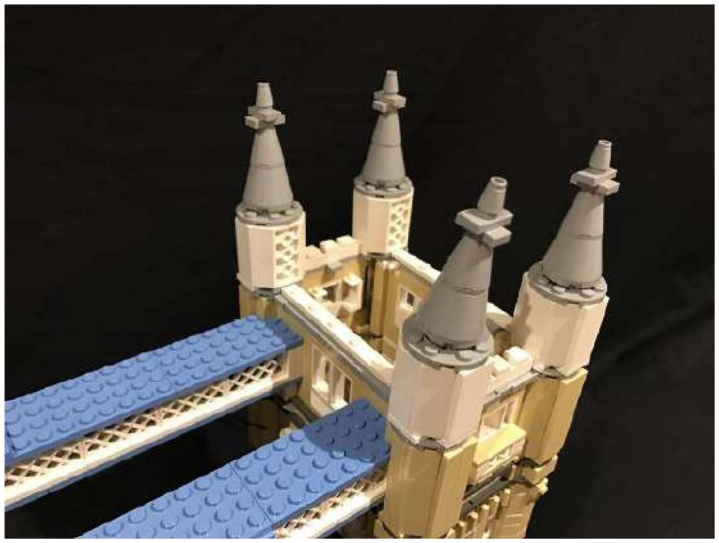
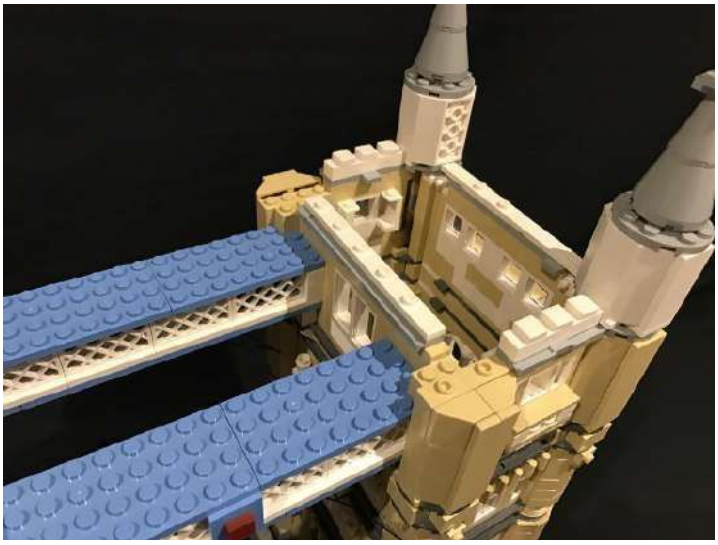
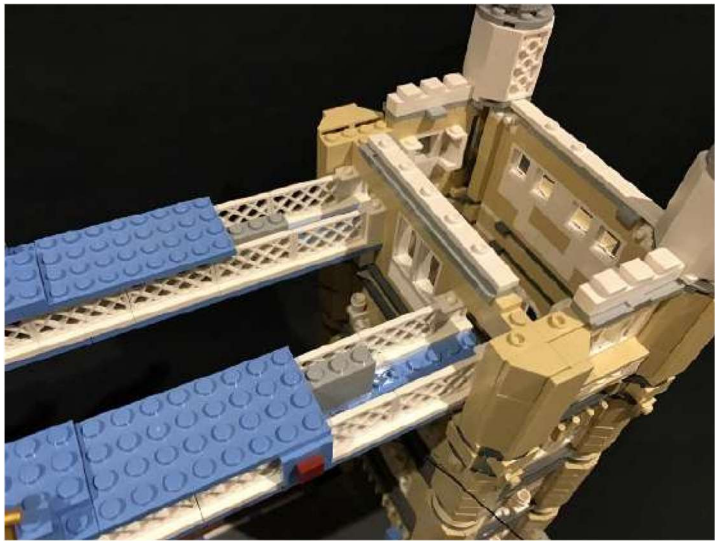


Repeat this step to install the second lot of strip lights.

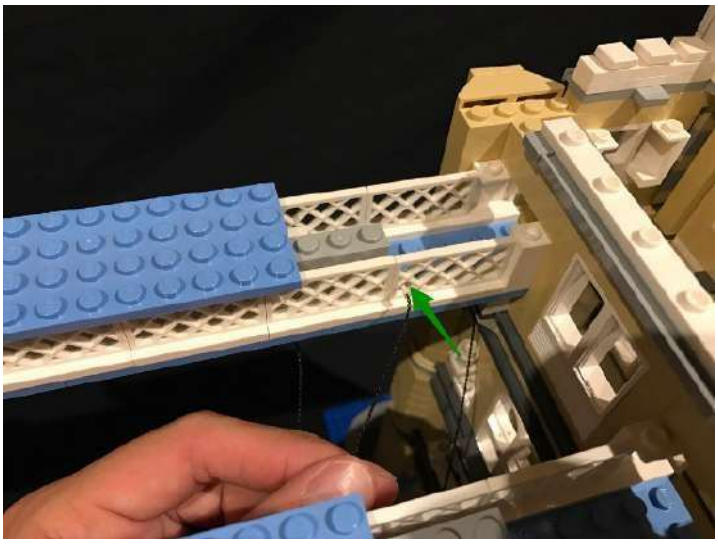


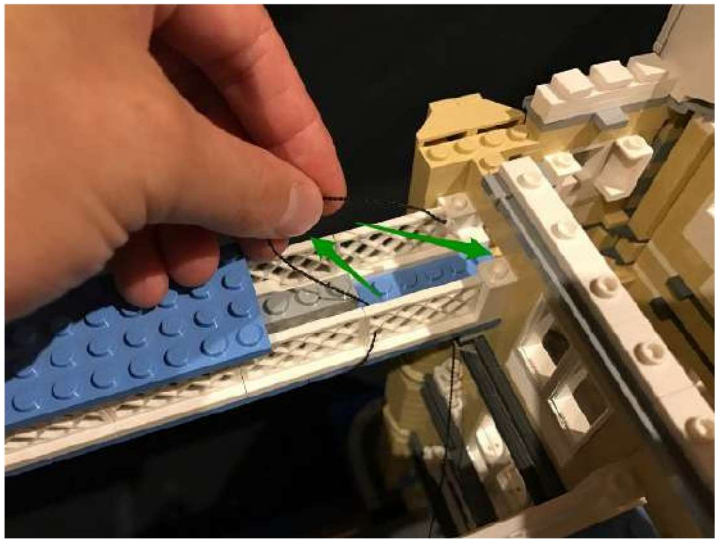
Turn on the battery pack to verify all is working OK.

15.) Remove the top section of the right tower and then disconnect thetwo corner sections as well as the blue plates on each side.

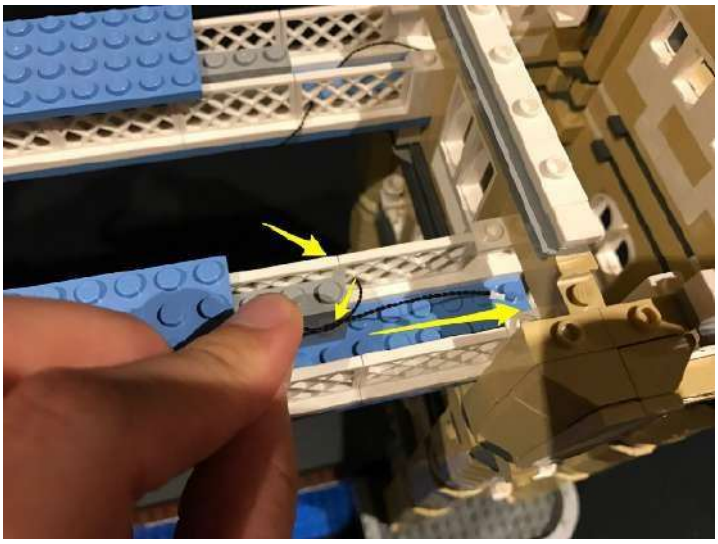




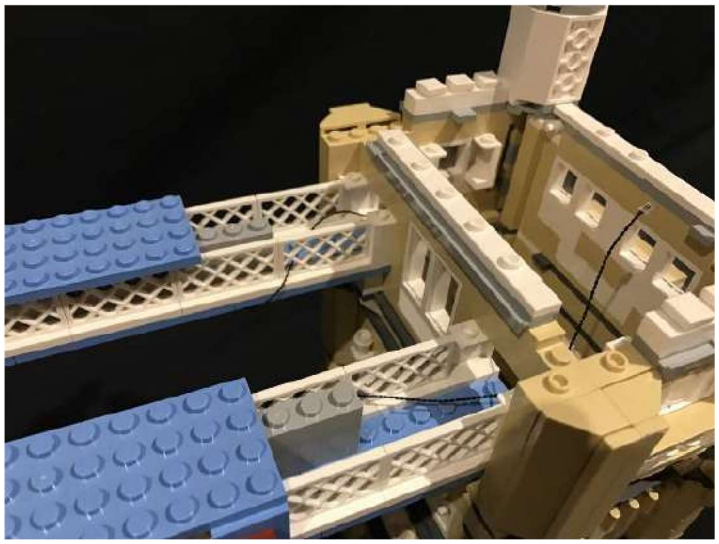
Take one of the spare 15cm cables from underneath and thread it up through the gaps of one of the gate pieces which leads inside. Pull the cable up from the inside and then thread through the spacing which leads inside the right tower.

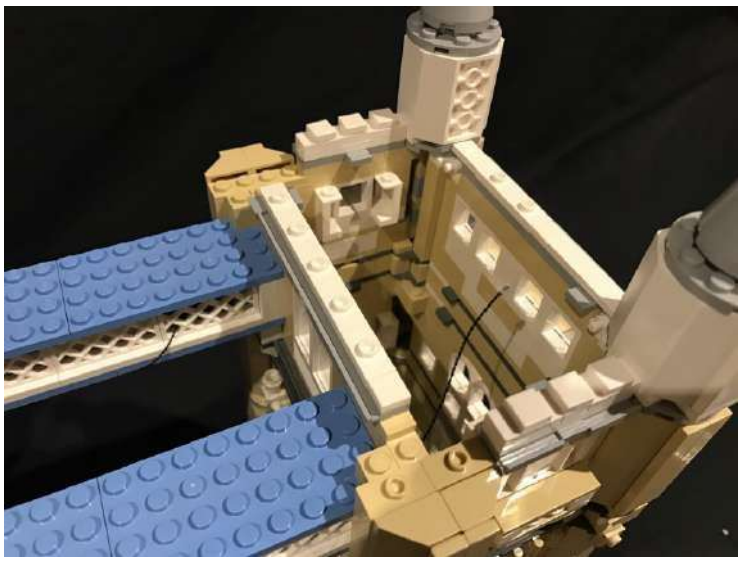




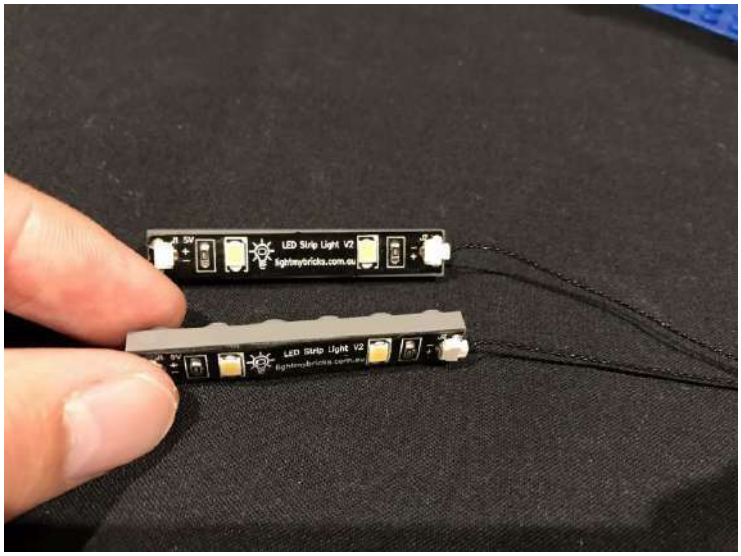
Repeat this step to thread the other 15cm cable through to the other side of the right tower and then reconnect the blue plates.



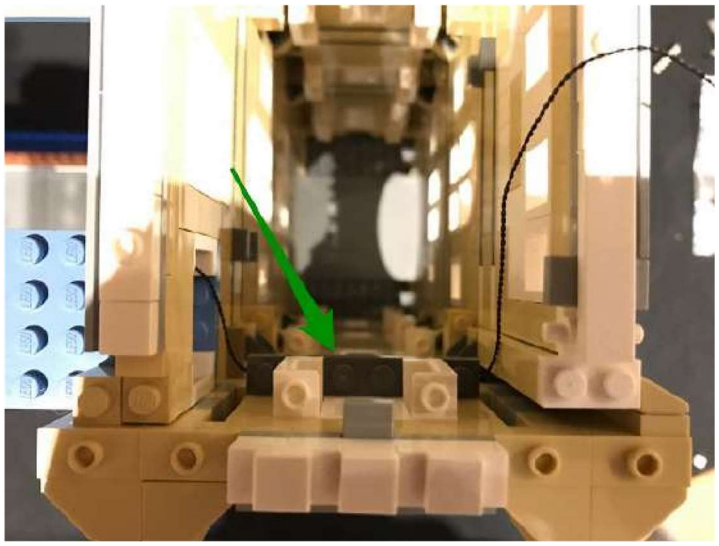




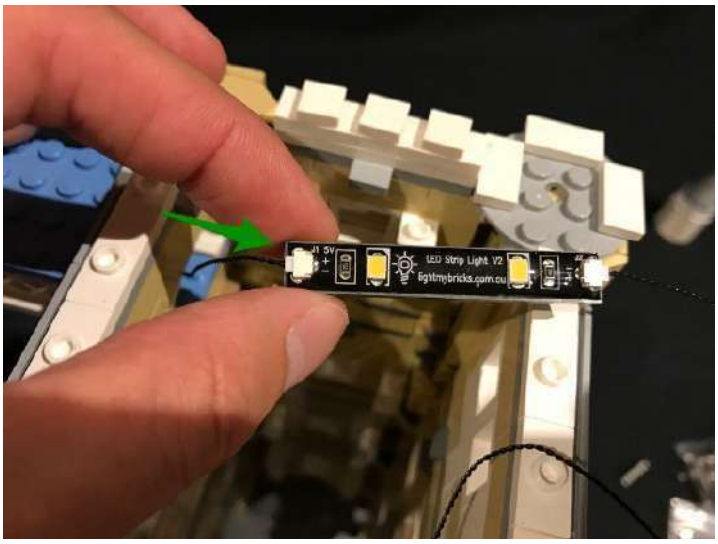
16.) Take another 2x White Strip Lights and then stick them to provided LEGO 1x6 Plates. Connect another 15cm Connecting Cable to each right port of the strip lights.

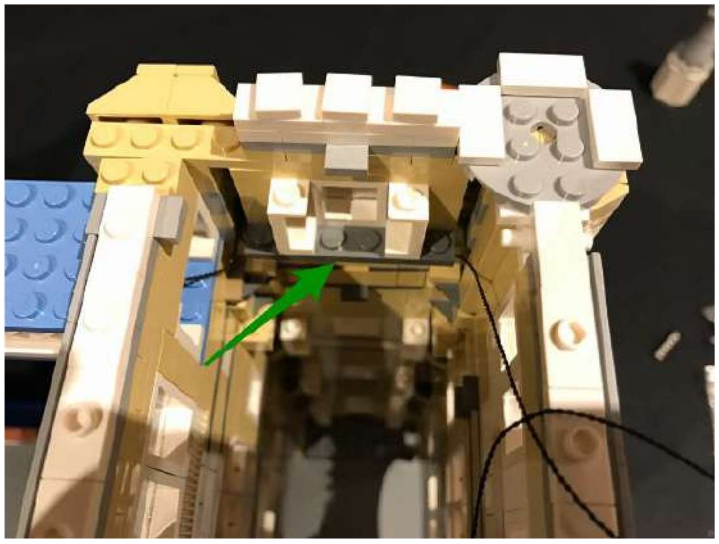


Take one of the strip lights and connect one of the cables from the bridge to the left port before mounting the strip light to the inside of the tower in the below position.

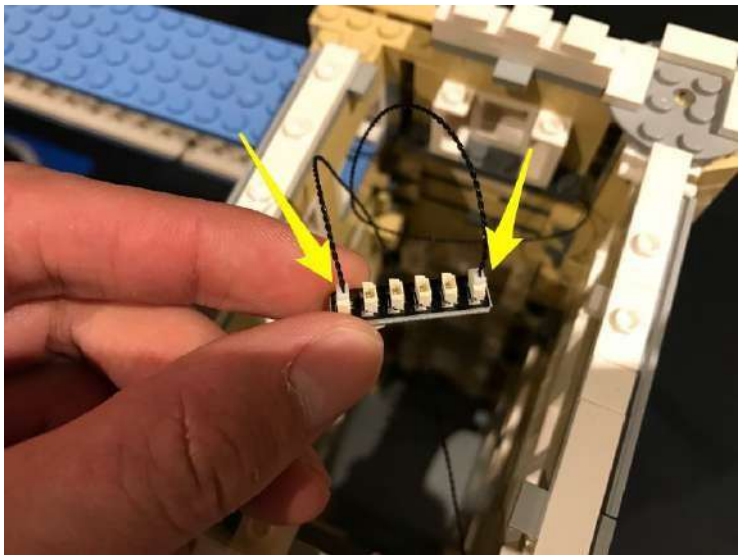


Repeat this step for the other strip light.

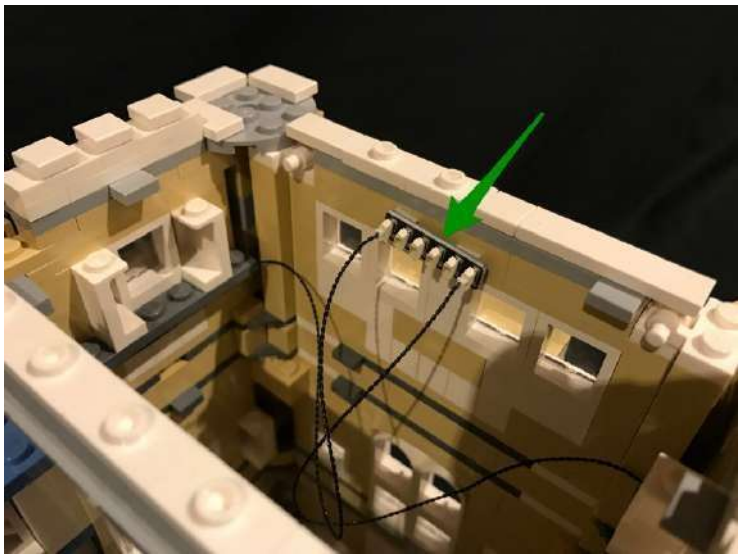




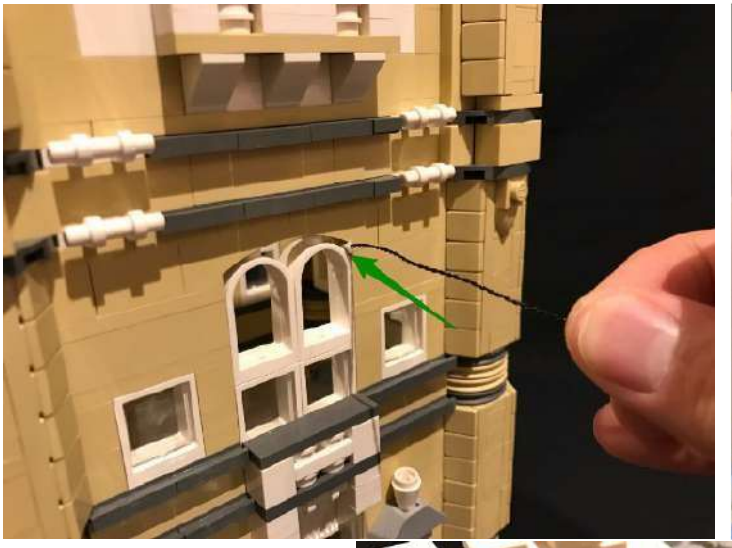
17.) Take another 6-Port Expansion Board and then connect the spare 15cm cable from each of the strip lights below to the side ports.

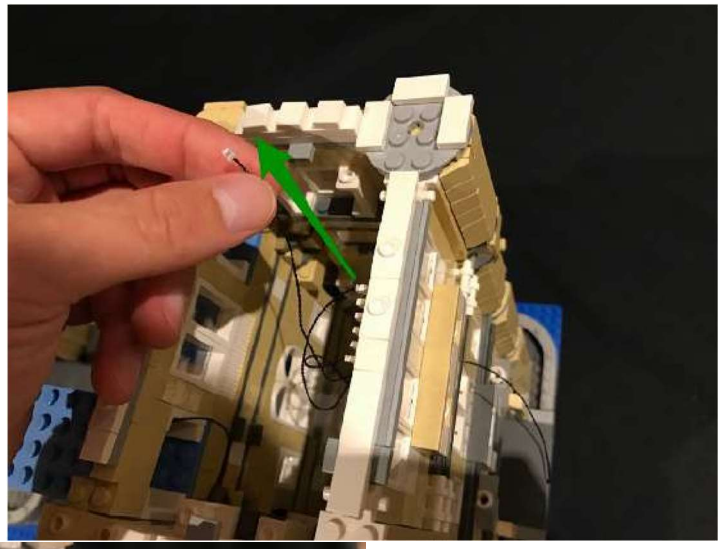


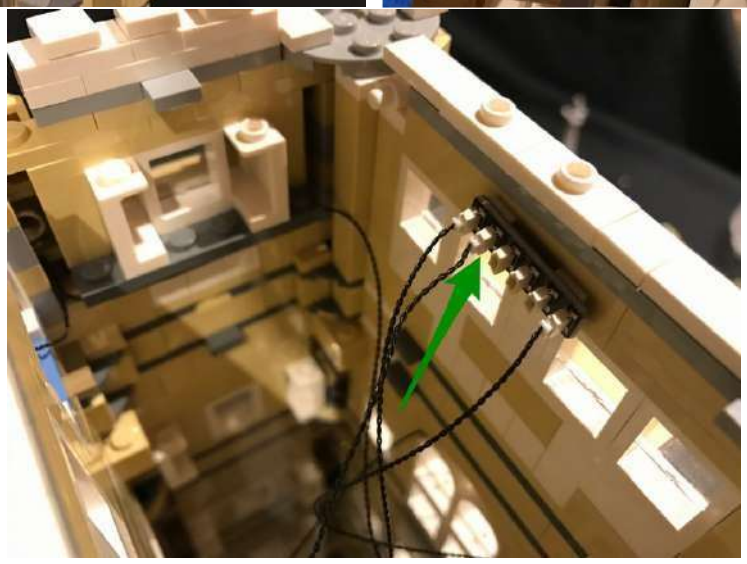
Mount the expansion board to the inside of the tower using 2x adhesive squares.



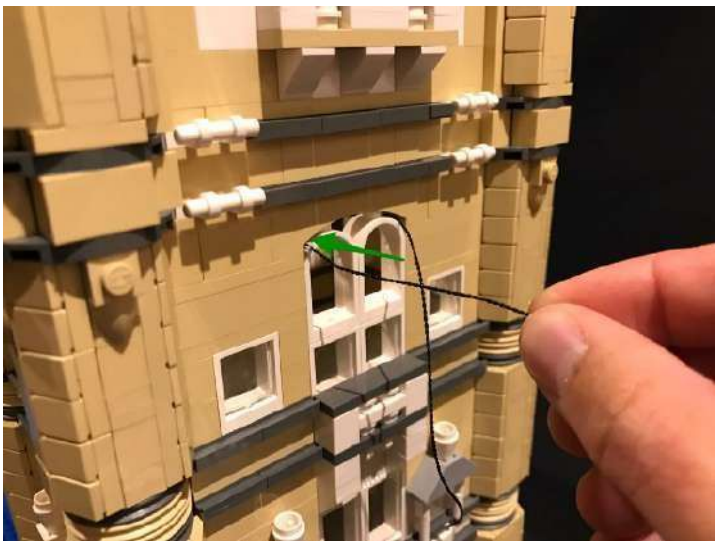
18.) Take a 30cm Connecting Cable and from the outside of thebuilding, thread the cable through space above the arch window. Pull it up from the inside of the building and then connect to the expansion board.

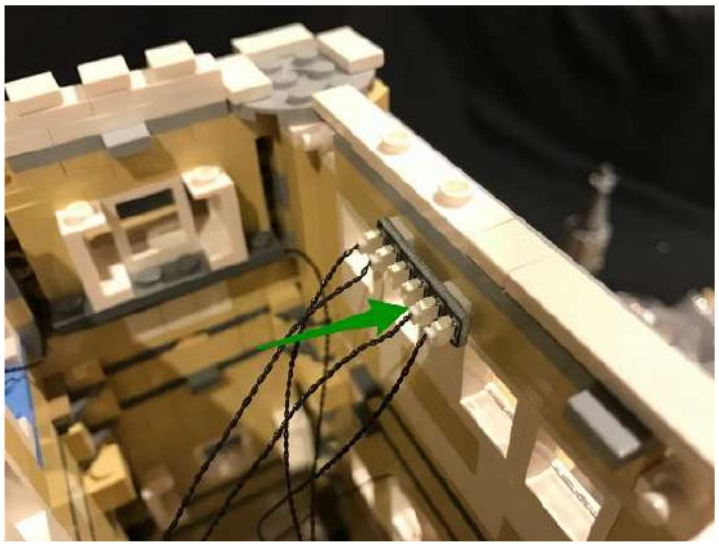




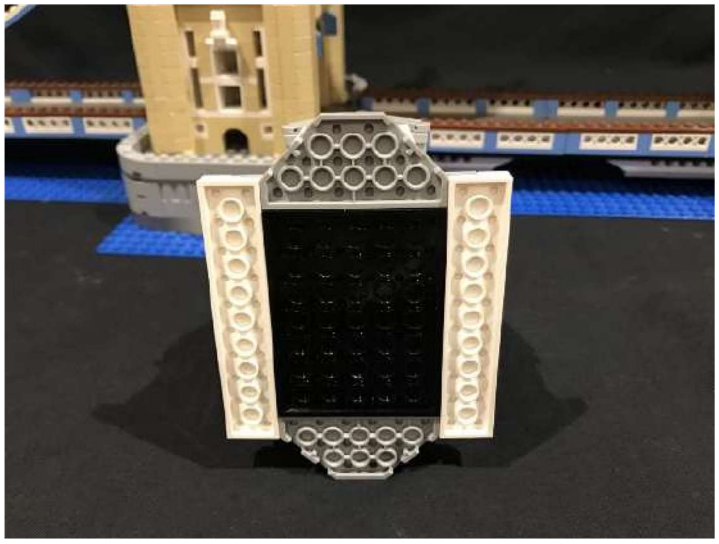
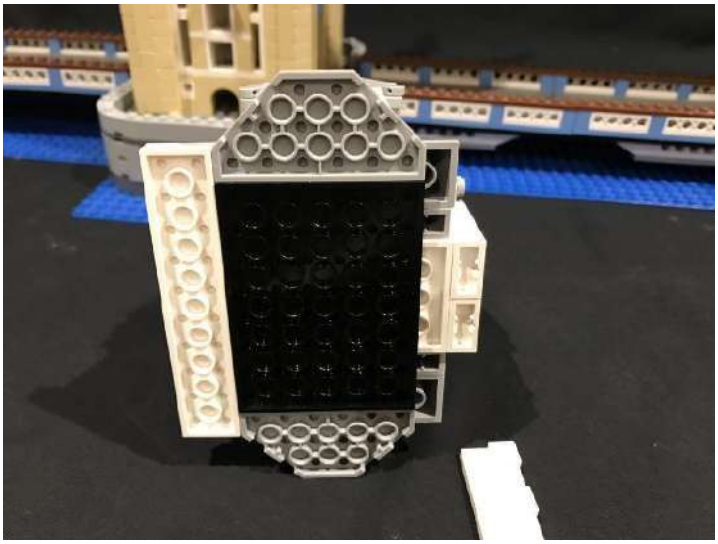


Repeat this process to thread and connect another 30cm Connecting Cable

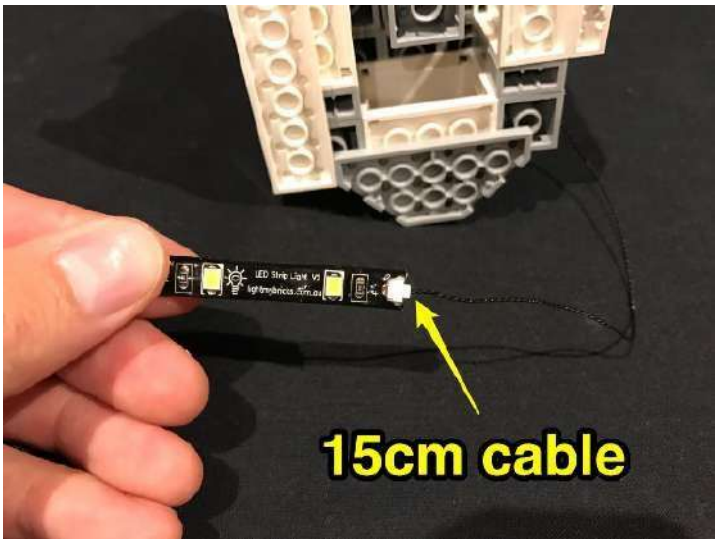


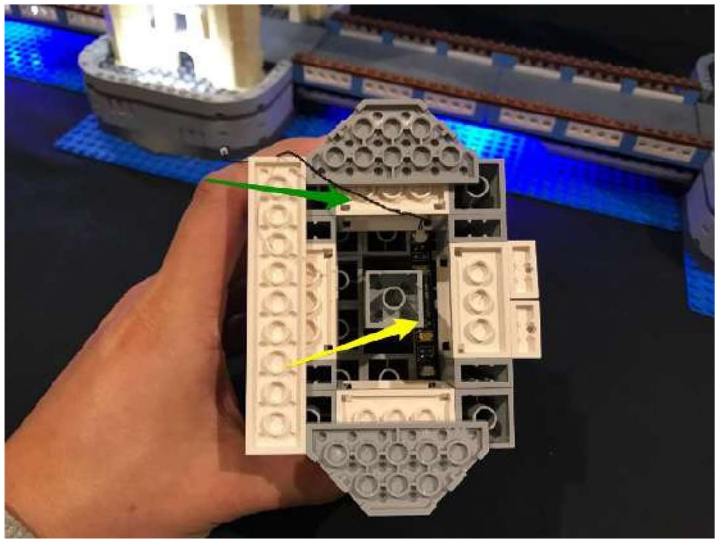


19.) Take the top section of the tower we removed earlier and then turnover to remove white and black plates underneath.

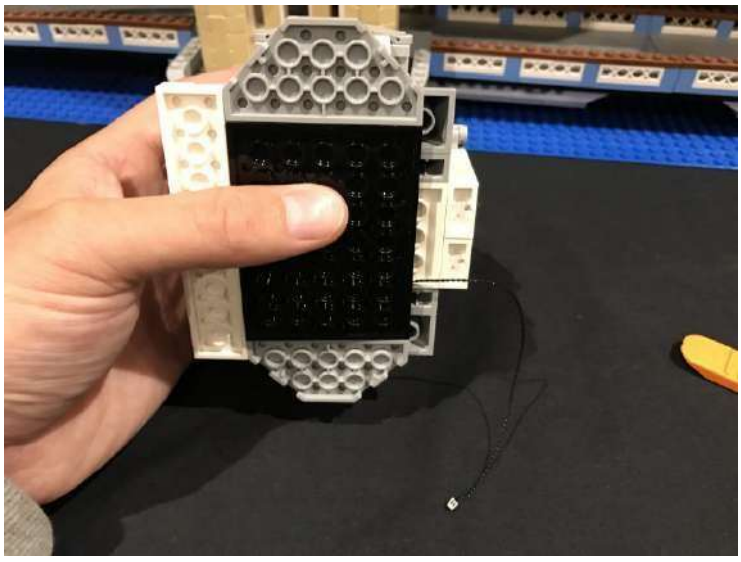



Take a White Strip Light and connect a 15cm Connecting Cable to the right port. Stick the strip light to the roof of this section in the exact position as per below, ensuring the cable is this time, facing up.

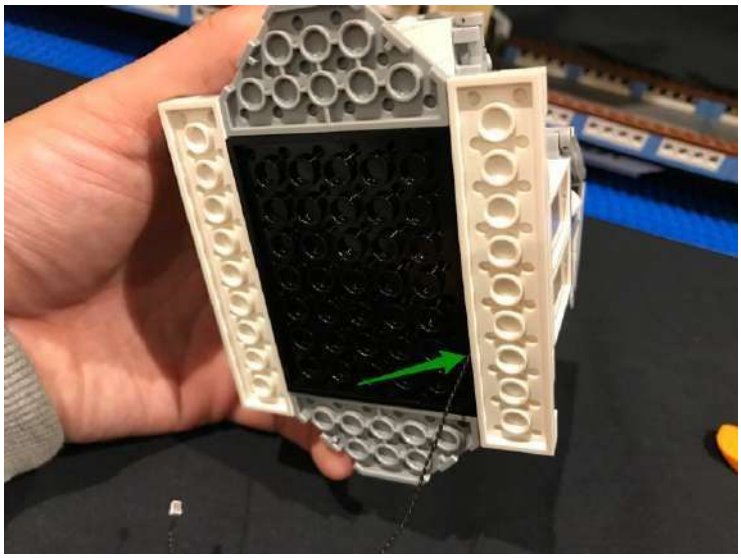




Pull the cable towards the right and then reconnect the black plate.



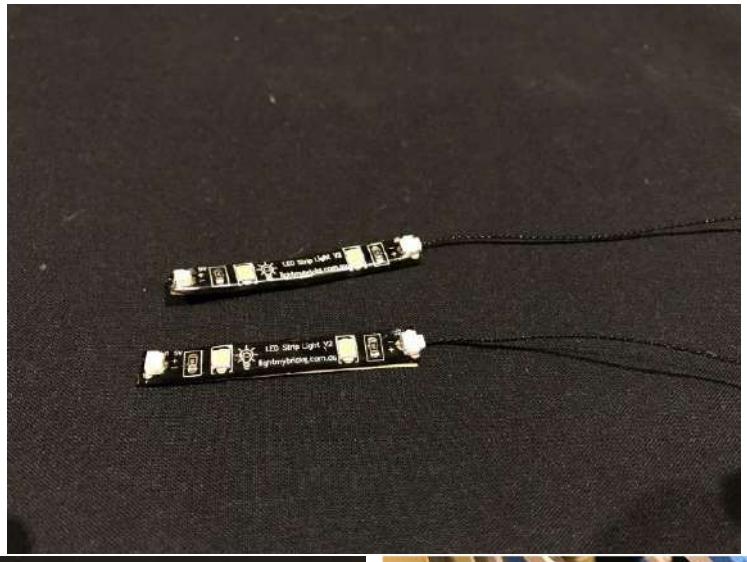
Reconnect the white plate ensuring the cable is in between black and white plates as shown below.

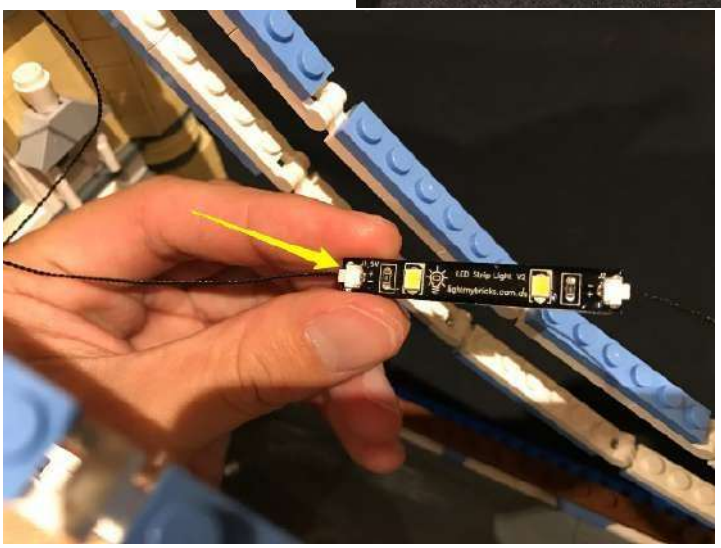


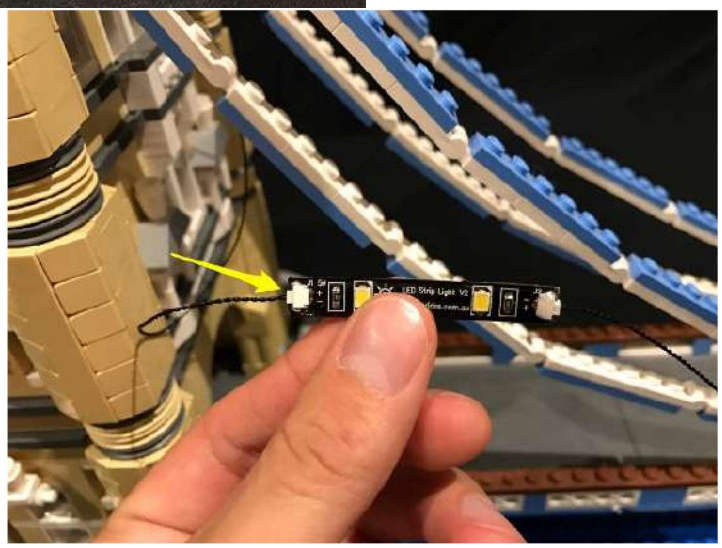
Take the top section of the tower and then connect the other end of the 15cm cable to one of the ports on the expansion board then reconnect this section on top of the tower and secure in place.

Test all the lights installed so far are working OK by turning on the battery pack.

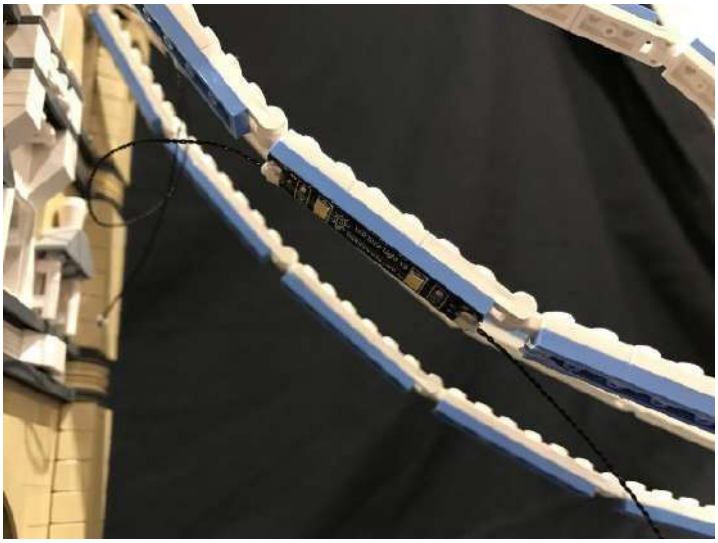
20.) Take 2x White Strip Lights and connect a 15cm Connecting Cable to each right port. Take both set of strip lights and then locate the 30cm cables from the arch windows. Connect them to each strip light port.

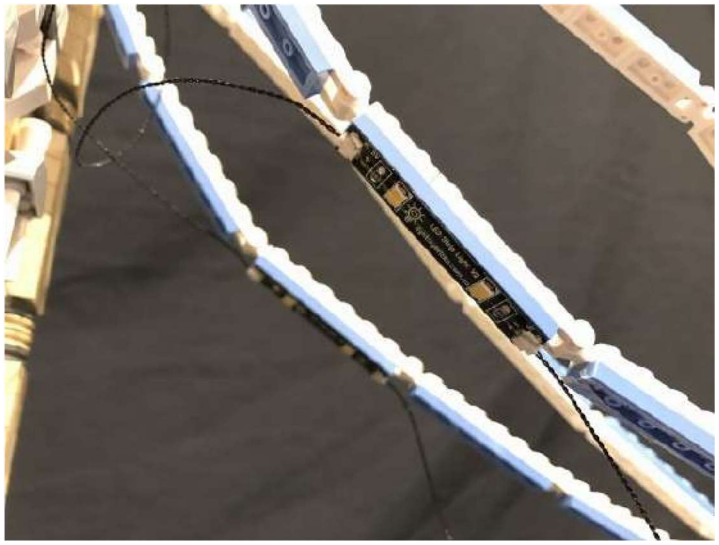




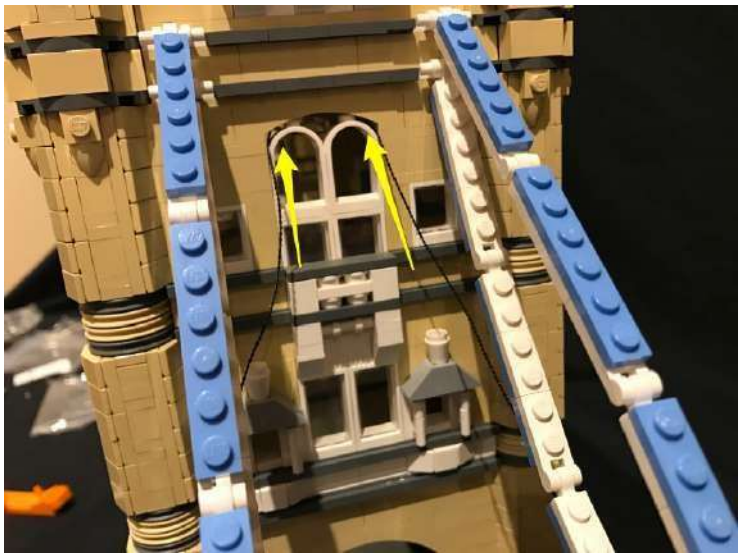


Stick both strip lights to the blue plates 3rd from the left of the tower.

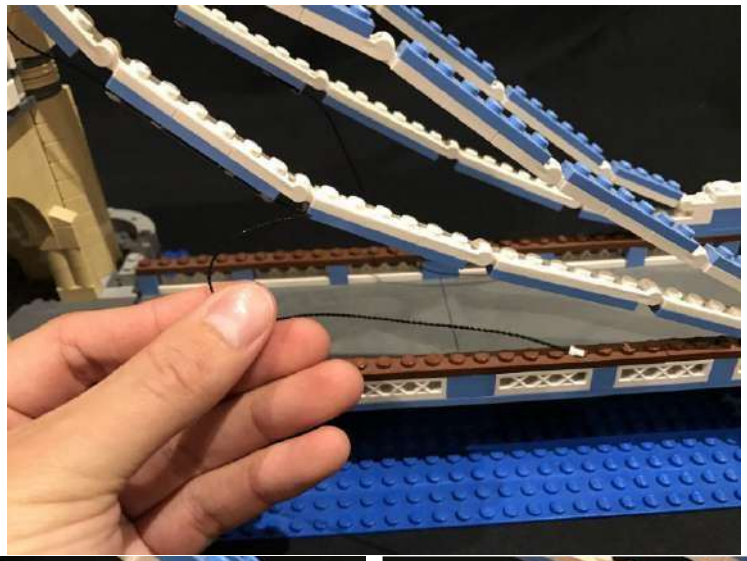


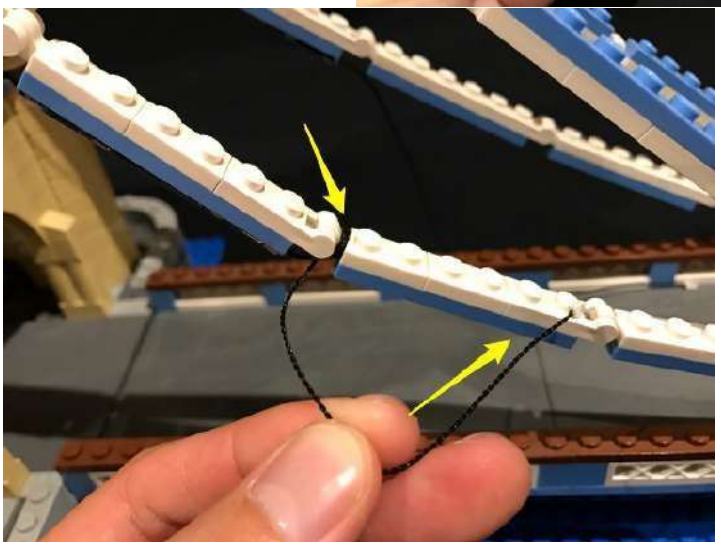


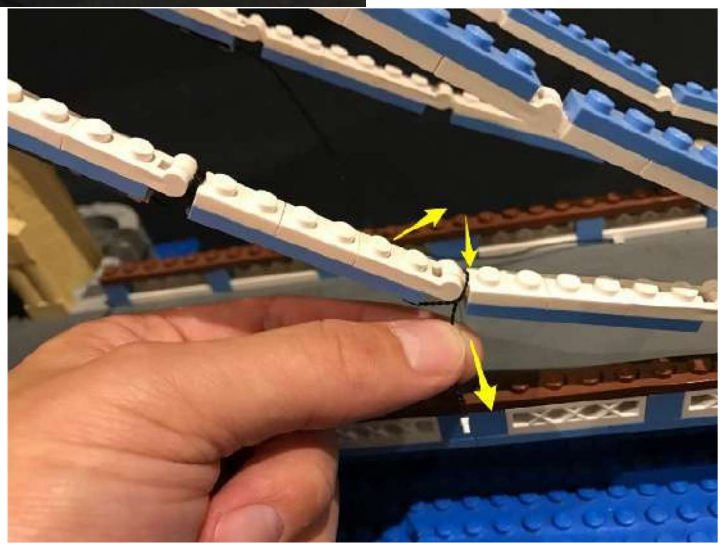
Thread any excess 30cm cable back up into the tower to avoid too much of it from dangling down.



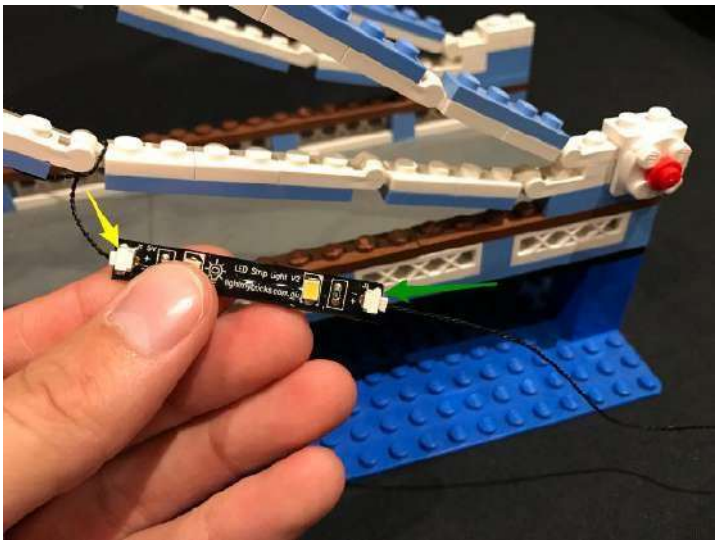
21.) We now need to eliminate excess of the 15cm cables from the striplights before connecting the next lot of strip lights. To do this, repeat the same method we used to eliminate excess cable from the other side of the bridge by winding the cables around in between lego plates. Follow the below images as a guide.

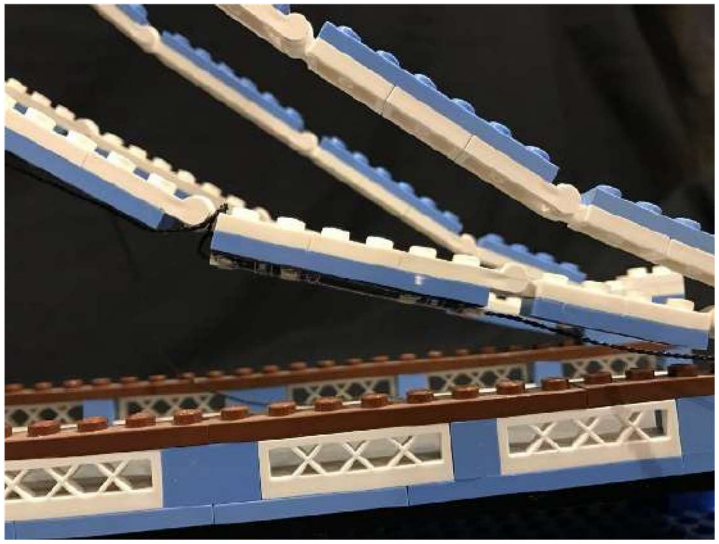


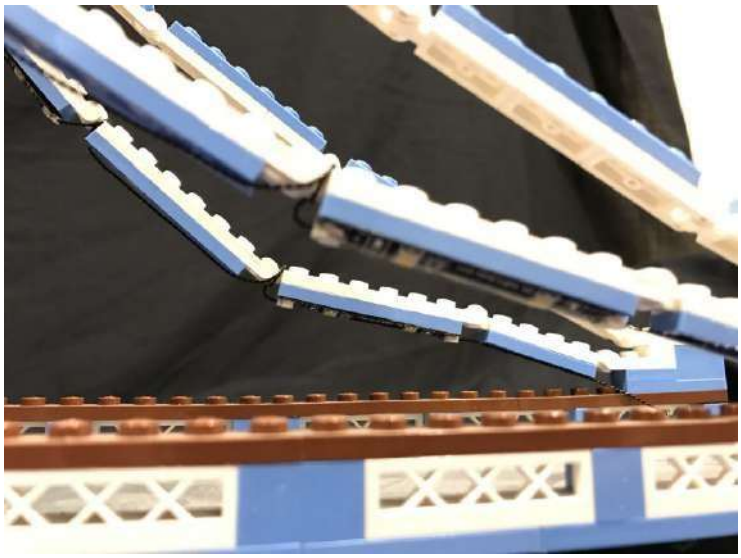




Take another 2x White Strip Lights and then connect each 15cm cable we wound around the plates to the left ports. Connect another 15cm Connecting Cable to the other end of each strip light before sticking the strip lights to the blue plates 5th from the left of the tower.

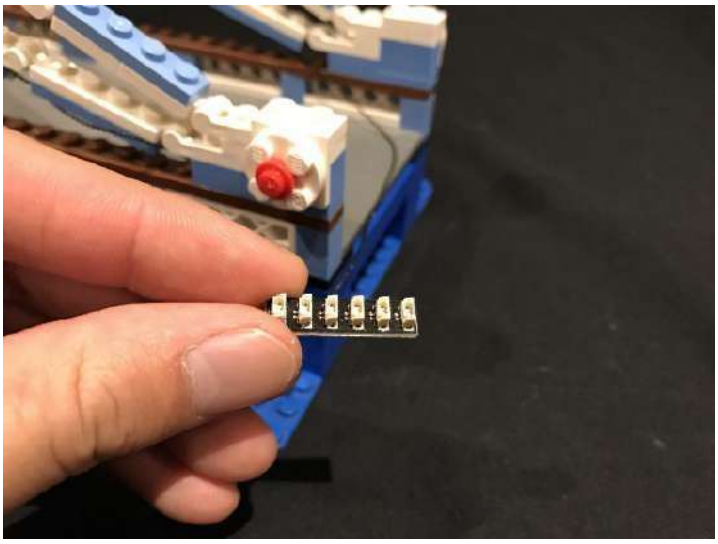


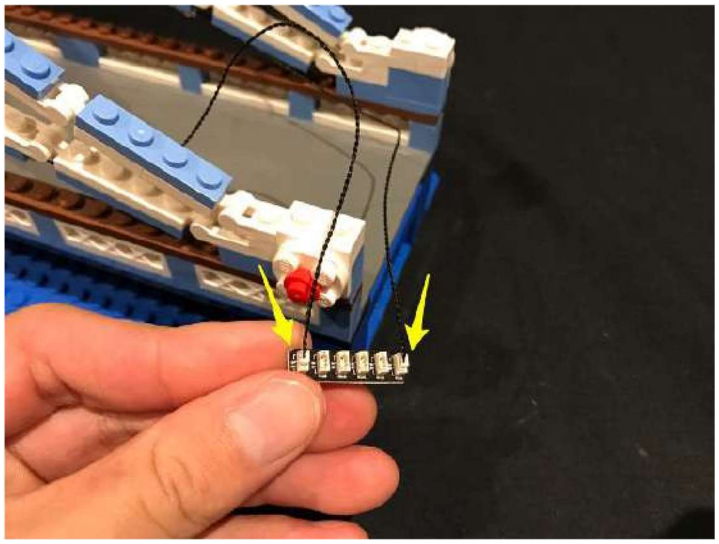




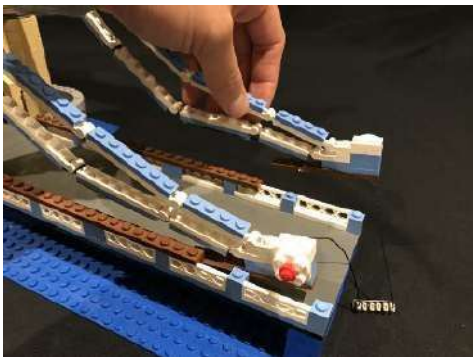
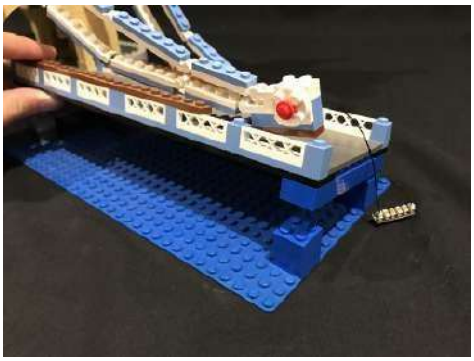
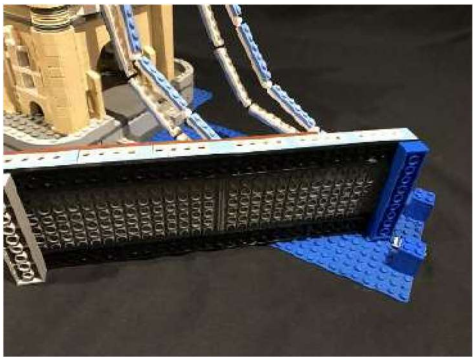
Test all lights are working ok by turning on the battery pack

22.) Take the last 6-Port Expansion Board and then connect the other end of the two 15cm cables from the strip lights to the side ports.

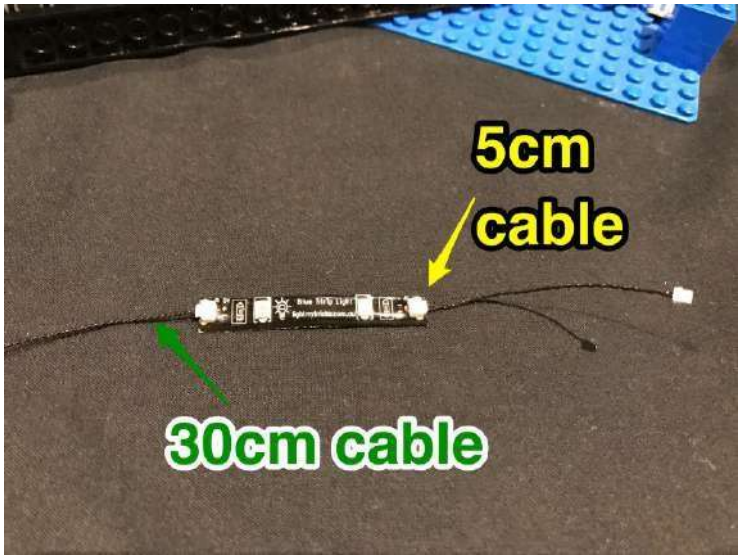




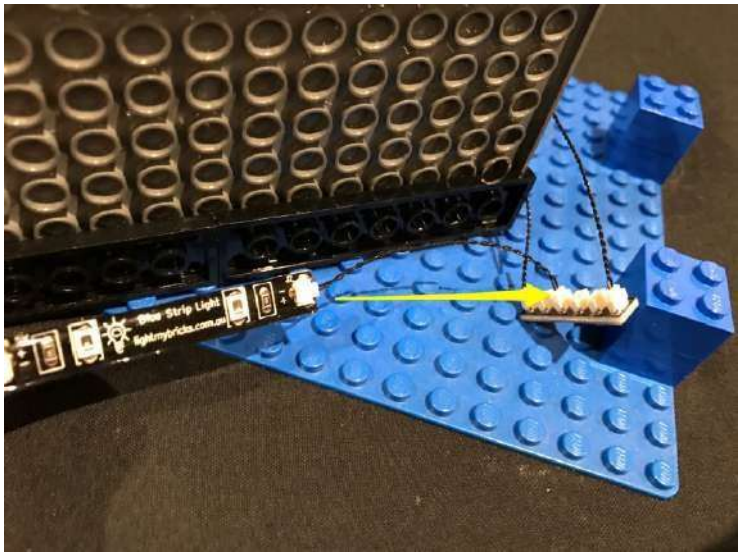
Disconnect the 2 bridge sections as well as the road section and then turn the entire road over as per below:

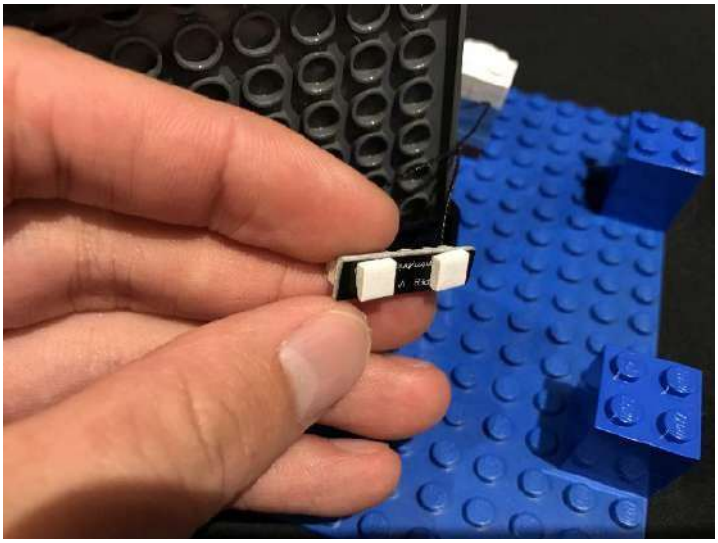
23.) Take the last Blue Strip Light and then connect a 5cm Connecting Cable to the right port and a 30cm Connecting Cable to the left port.

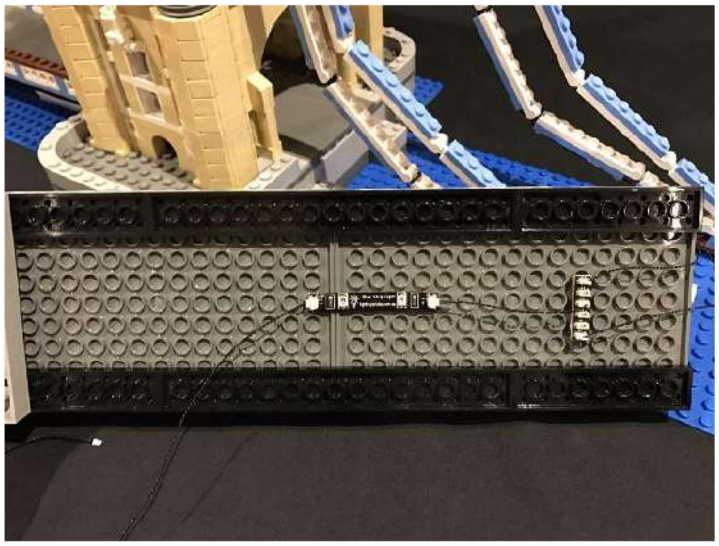


Remove the Blue 2x10 brick from underneath the bridge road section and then connect the other end of the 5cm cable to the expansion board.

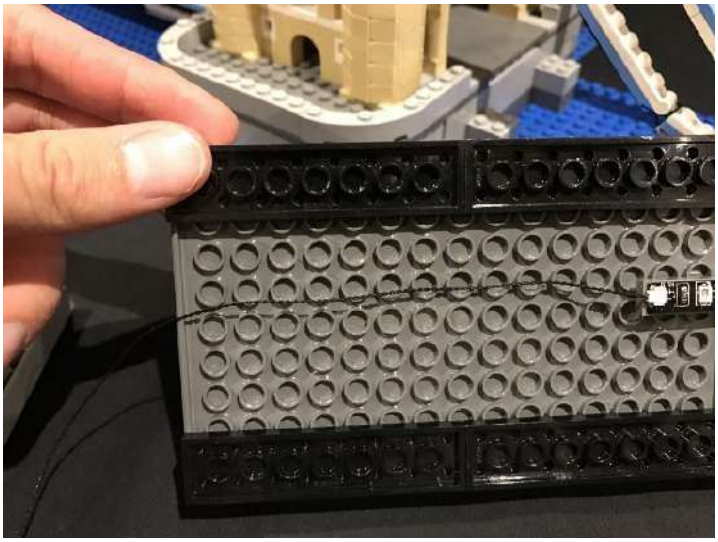


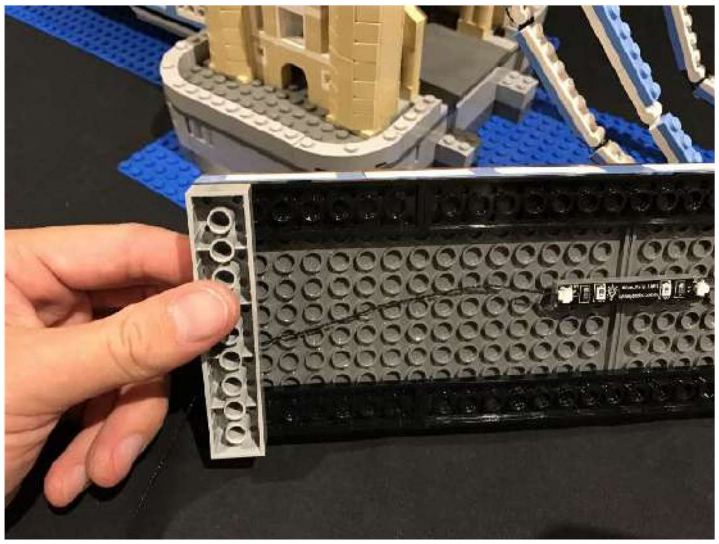
Using the adhesive backing on the blue strip light and another 2x adhesive squares for the expansion board, mount both underneath the bridge road section in the following positions:



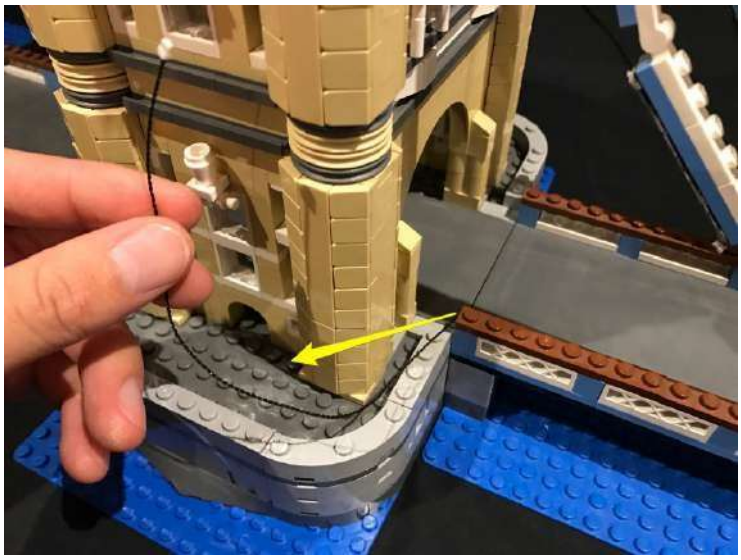


Thread the 30cm cable from the blue strip light underneath the light grey 2x10 brick.

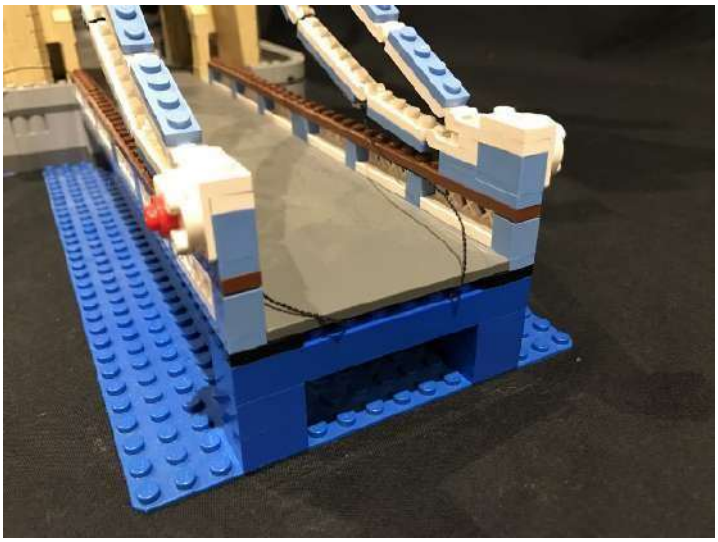


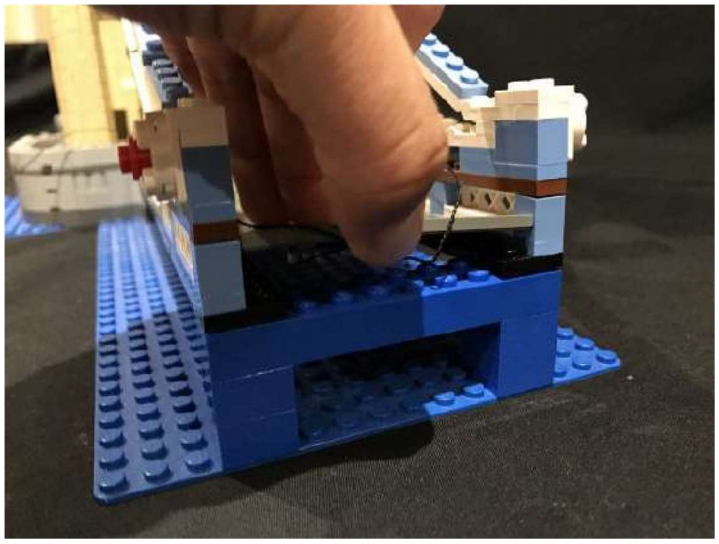


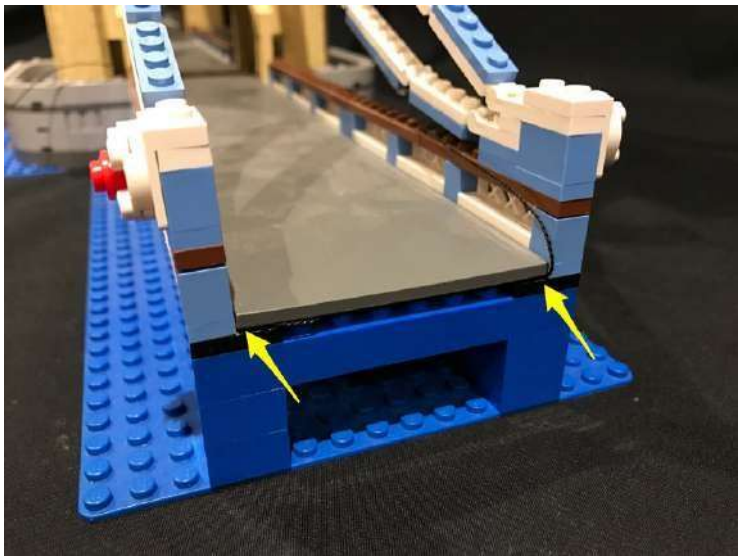
Reconnect the entire bridge section ensuring the 30cm cable is accessible from the front.



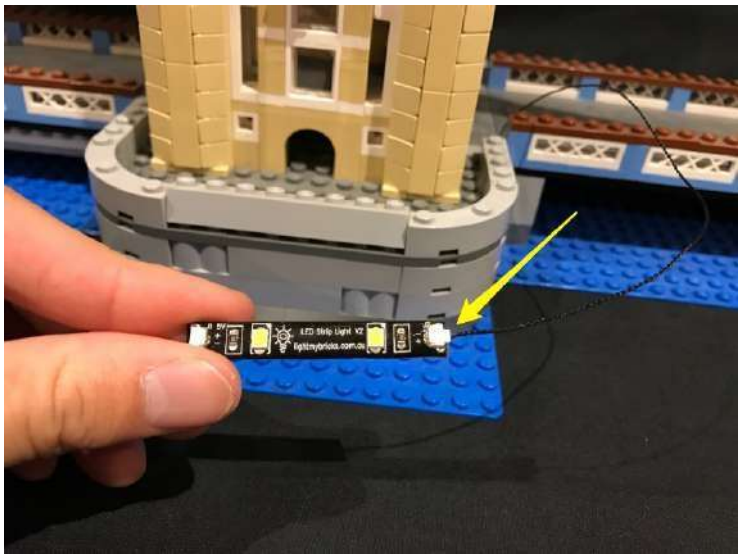
From the right side of the bridge, secure the two 15cm cables to the corners by lifting up the road plate and then reconnecting over the cables ensuring they are laid in between studs.



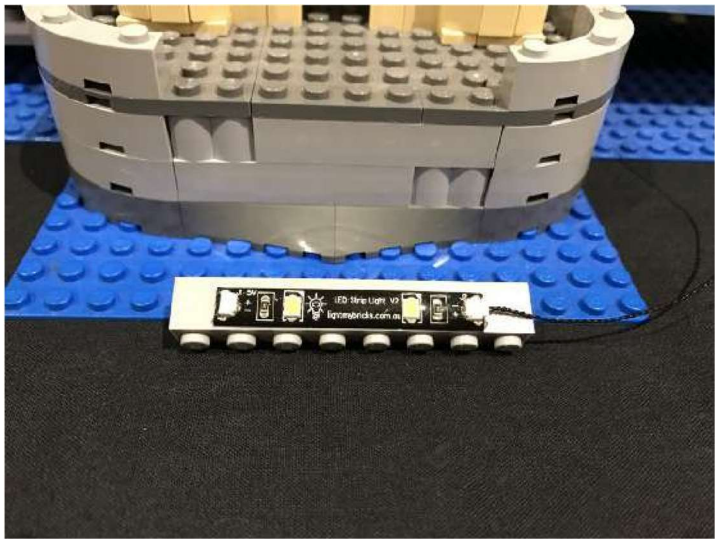




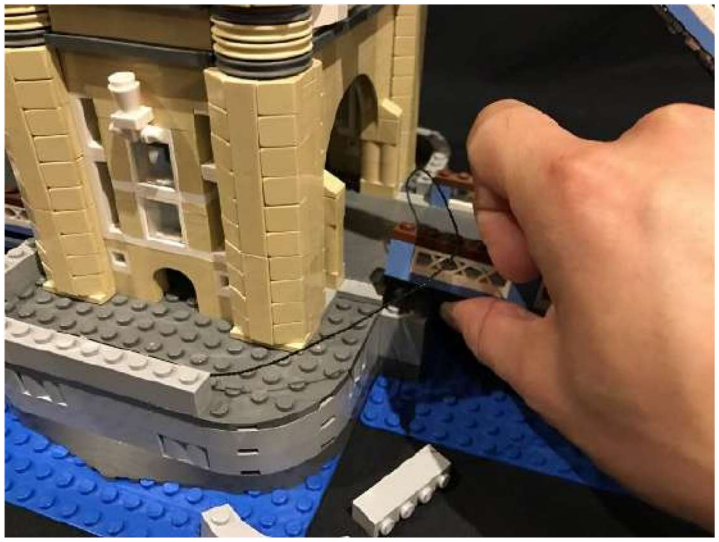
24.) Take the last White Strip Light and then connect the other end of the 30cm cable to the right port.



Remove the grey 1x8 brick from the base of the tower and then stick the strip light to the inside of it and then reconnect the brick as per below.



Hide excess cable by laying them underneath the grey bricks on the tower base and then tuck then cable in underneath the road plate.



. . .

This completes installation of the Tower Bridge Light Kit. Your kit is now nally ready to be turned on. Turn on and ENJOY!

. . .

LIGHT MY
BRICKS

LIGHT MY
BRICKS