

# Light My Bricks: Winter Village Market



Here is the instructions document for the LEGO Winter Village Market LED lighting kit. Please read and follow the steps carefully to ensure this lighting kit is installed properly.

## Package contents:

- 8x Flashing White 15cm Bit Lights
- 3x White 15cm Bit Lights
- 3x White 30cm Bit Lights
- 4x White Strip Lights
- 1x Multi Colour Light Strings
- 1x 8-Port Expansion Board
- 1x 12-Port Expansion Board
- 1x 30cm Connecting Cable
- 3x 5cm Connecting Cables
- 4x Adhesive Squares
- AA Battery Pack (Requires 3x AA Batteries)
- Flat Battery Pack (Requires 2x CR2032 Batteries)

## LEGO Pieces

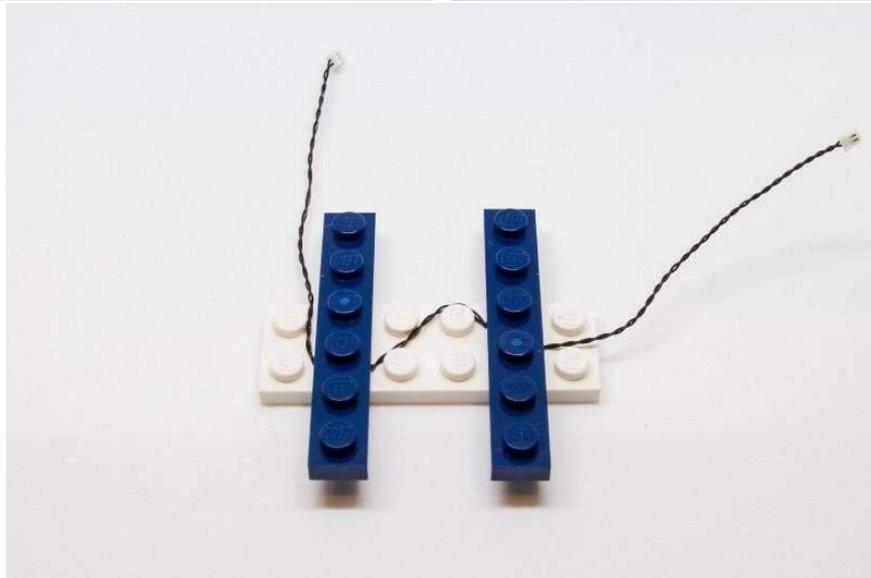
- 2x Trans Clear Plates 2x2 w Rounded Bottom
- 2x Plate 1x2 (any colour)

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## Important things to note:

### Laying cables in between and underneath bricks

Cables can fit 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

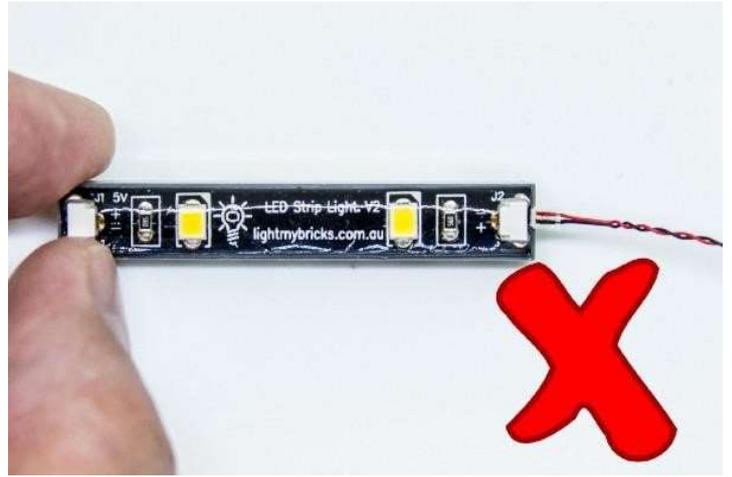
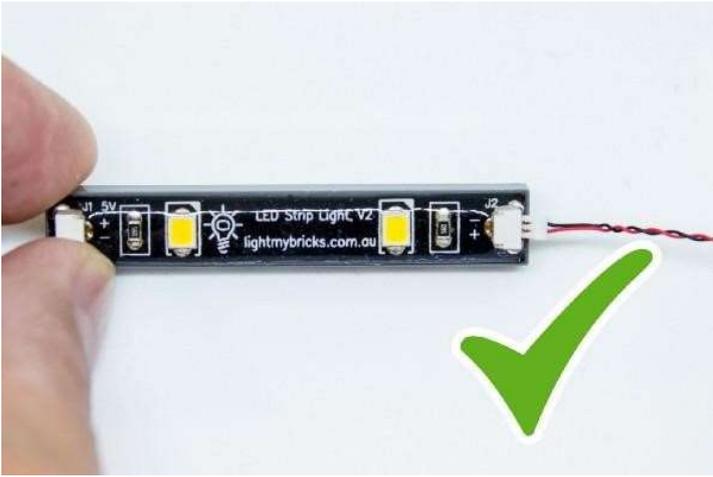
Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered “=” symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered “=” symbol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



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

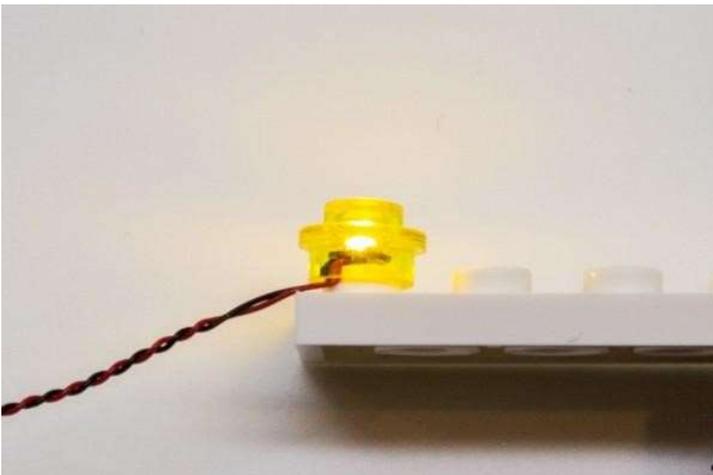
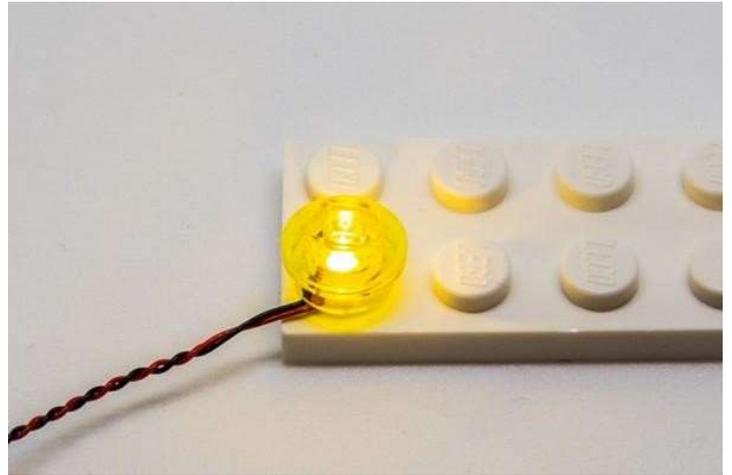
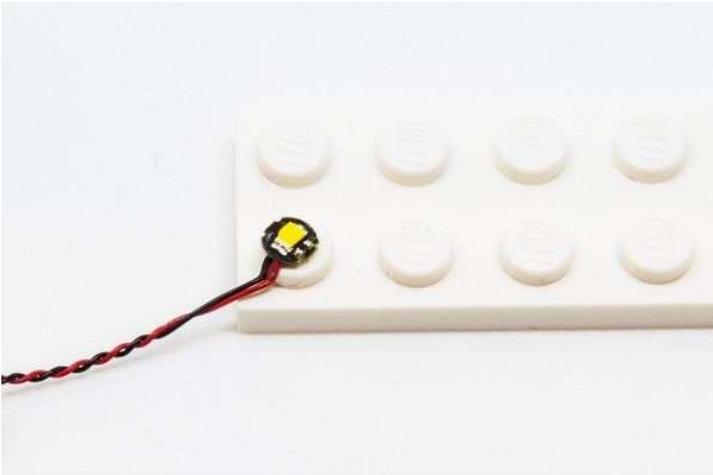
## Connecting cable connectors to Strip Lights

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 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.



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OK, Let's Begin!

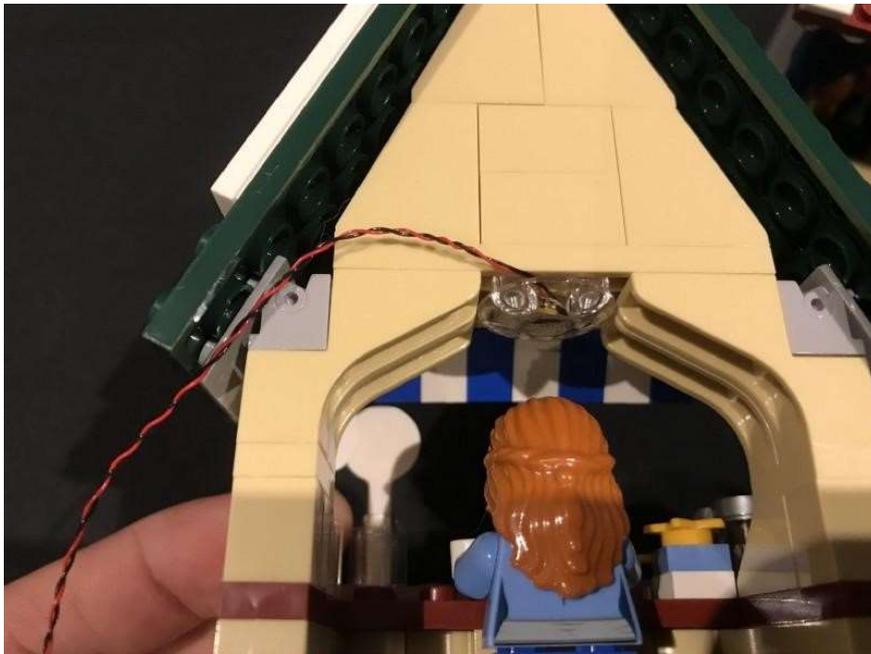
- 1.) We will start by installing lights to the two left sections (candy stand and chicken stand). Bring both forward and then take the candy stand and turn it around to the back side.



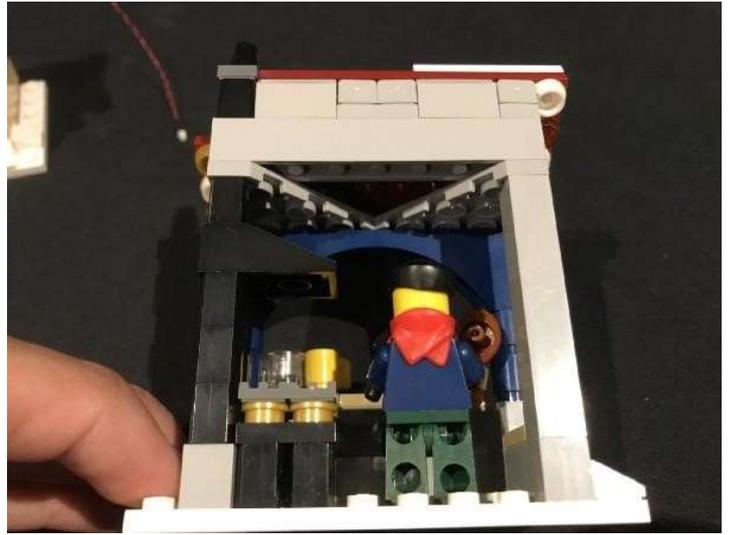
- 2.) Take a White 15cm Bit Light and place it under the roof of this section in the following position. Secure the Bit Light in place using one of the provided Trans Clear 2x2 Plate w Rounded Bottom. Ensure the LED is facing downward and placed in the middle of the LEGO plate.



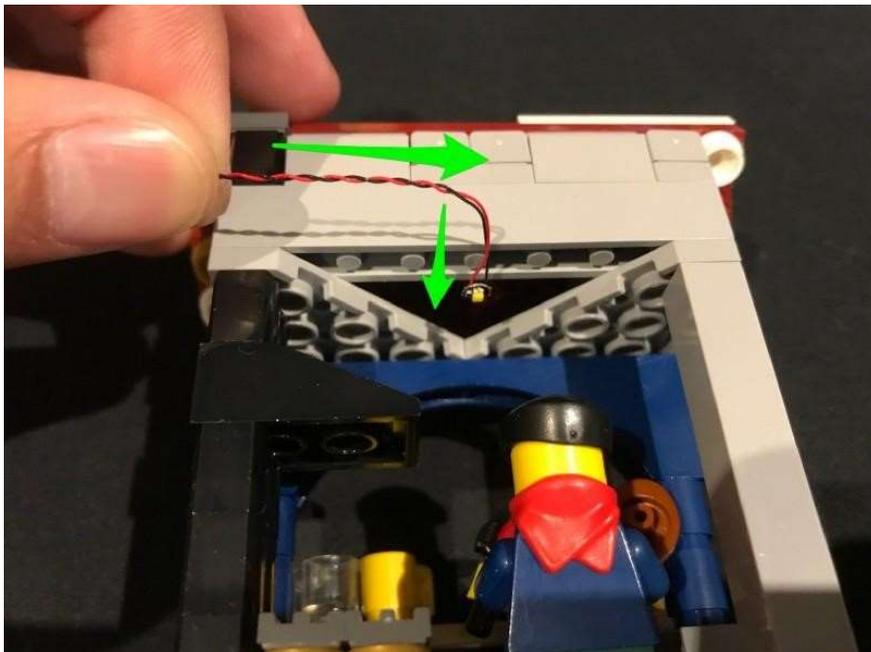
Pull the cable toward the left so that it is no obviously seen from the front.



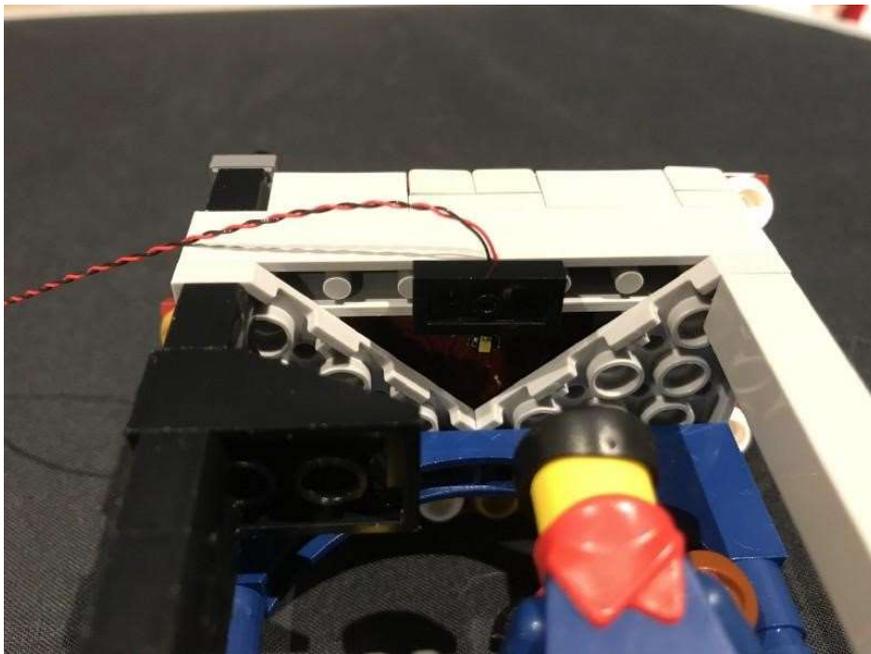
3.) Take the chicken stand and turn it around to the back side.



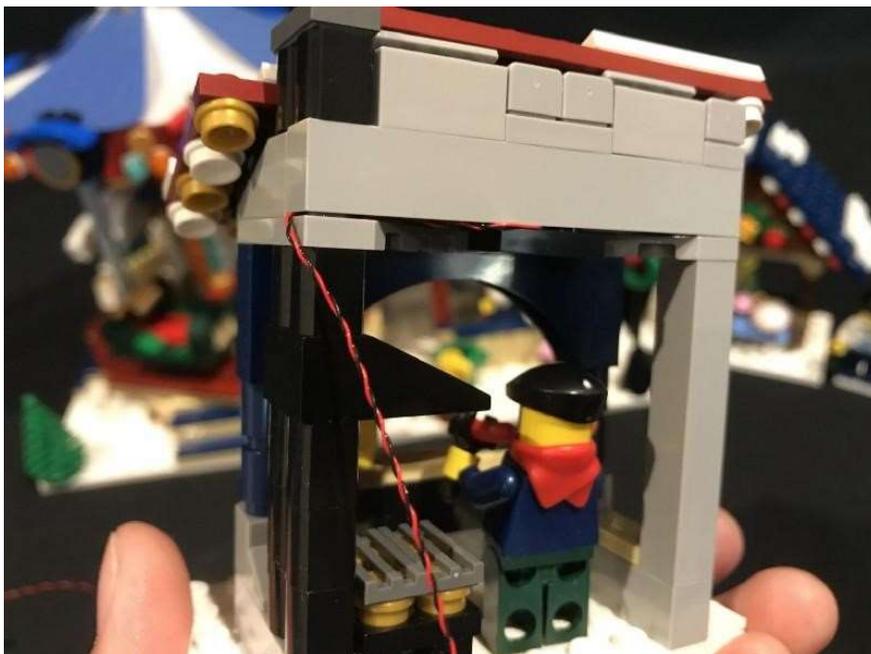
Take another White 15cm Bit Light and bend the cable on an angle as shown below.



Secure the Bit Light to the top using a provided LEGO 1x2 Plate and then pull the cable toward the left so that it is not obviously seen from the front.



Hide the cable underneath bricks as shown below



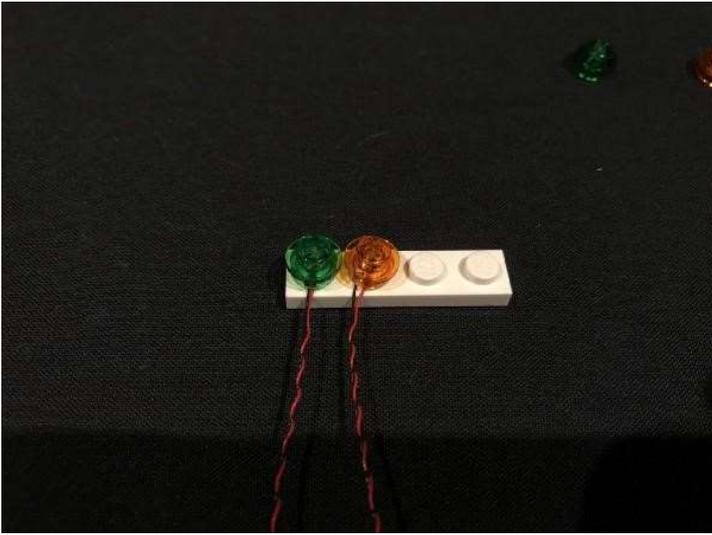
4.) Turn this section over to the front and then remove the 1x4 plate with round coloured light pieces.



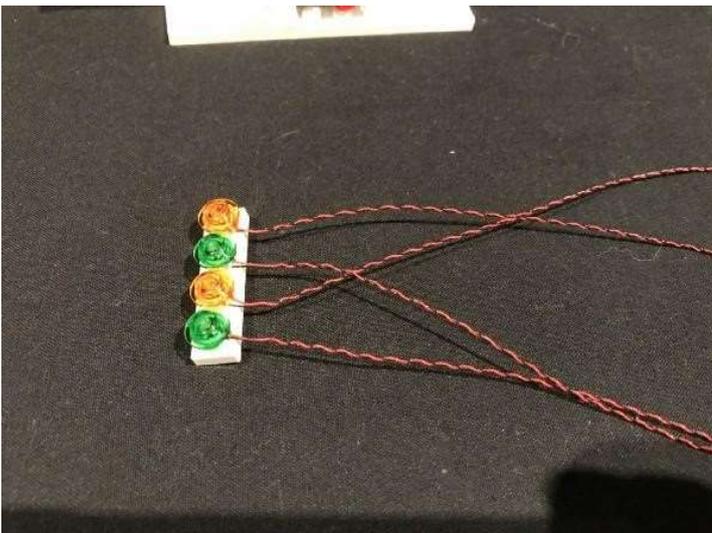
5.) Disconnect all the round coloured light pieces and then take a Flashing White 15cm Bit Light and place it directly over the far left stud. Secure the Bit Light in place by reconnecting the Trans Green Round Plate over the top as shown below.



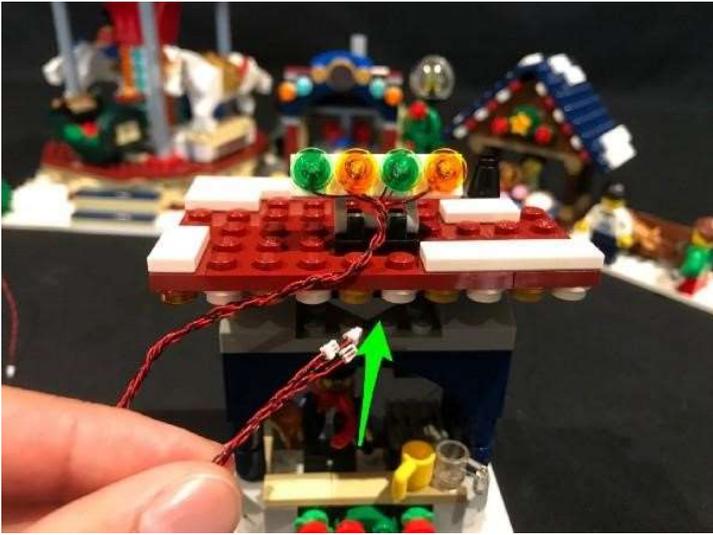
6.) Repeat the previous step to install another 3x Flashing White 15cm Bit Lights to the remaining studs on the 1x4 plate.



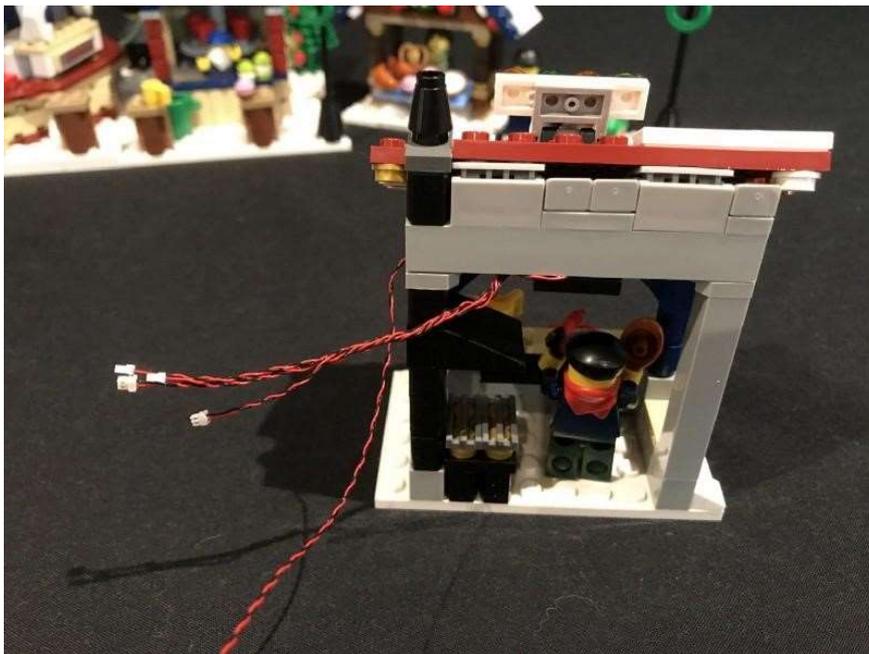
7.) Take all 4 cables from the Flashing Bit Lights and then twist them around each other forming one large cable.

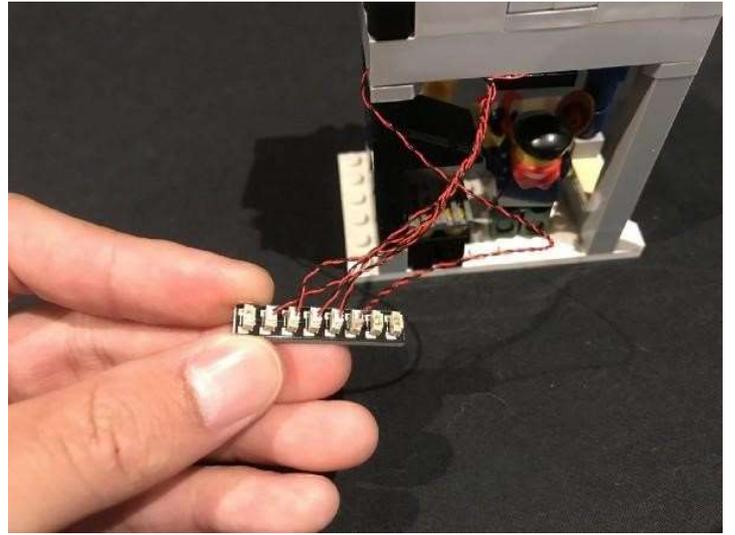
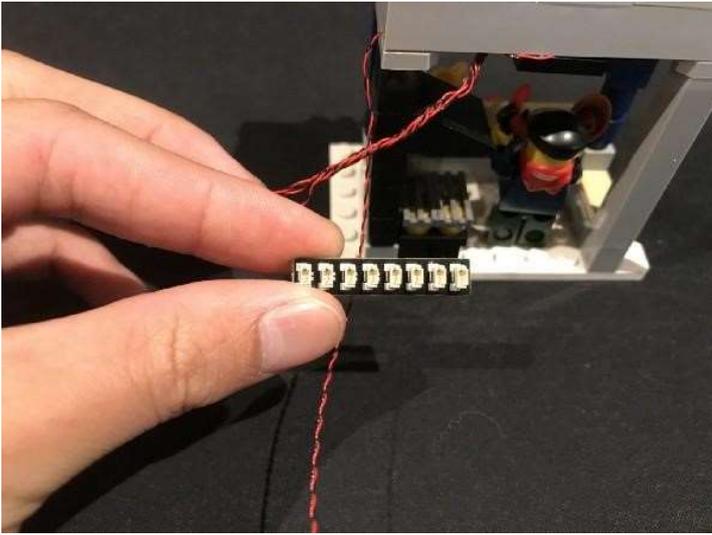


8.) Connect this section back to the roof and then lift up the roof to thread the large cable in through the spacing behind. Thread it all the way through and then reconnect this light section to the roof with cables facing down as per below.

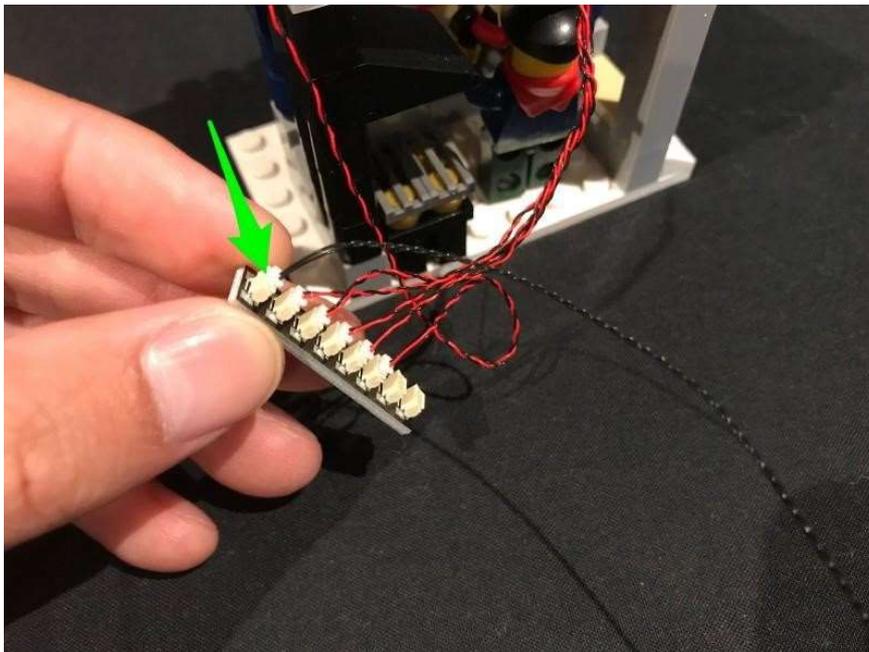


9.) Turn the stand over to the back side again and the pull the large cable towards the left then connect all cables from this stand to the 8Port Expansion Board

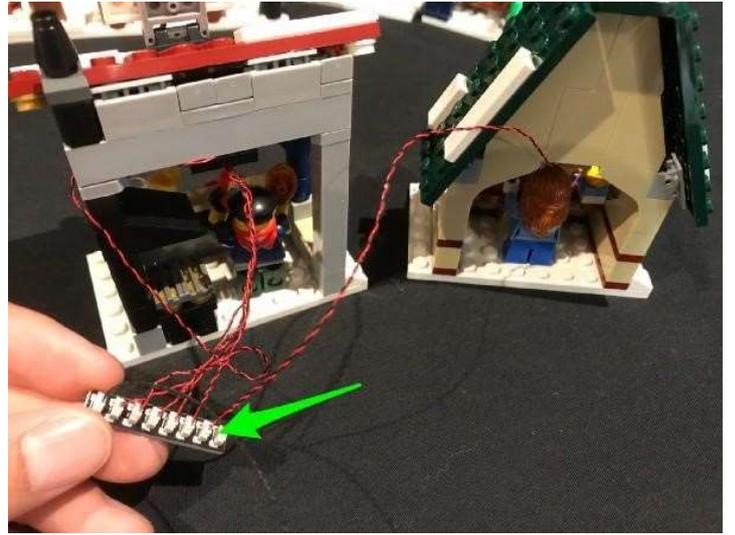




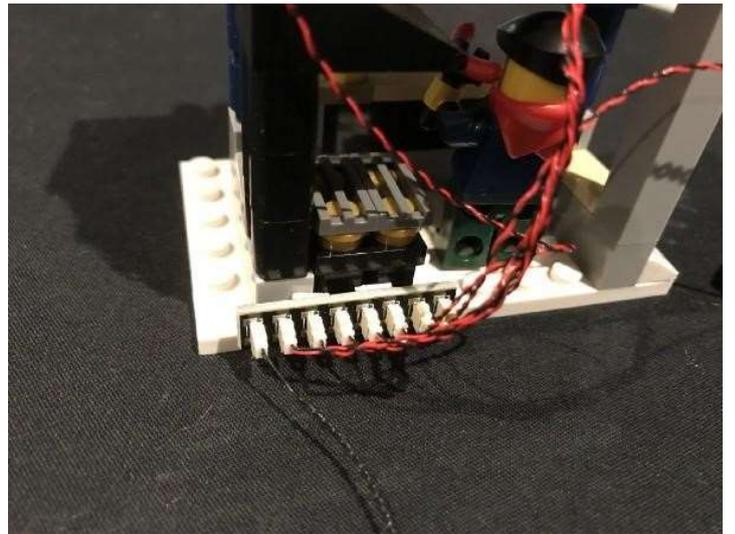
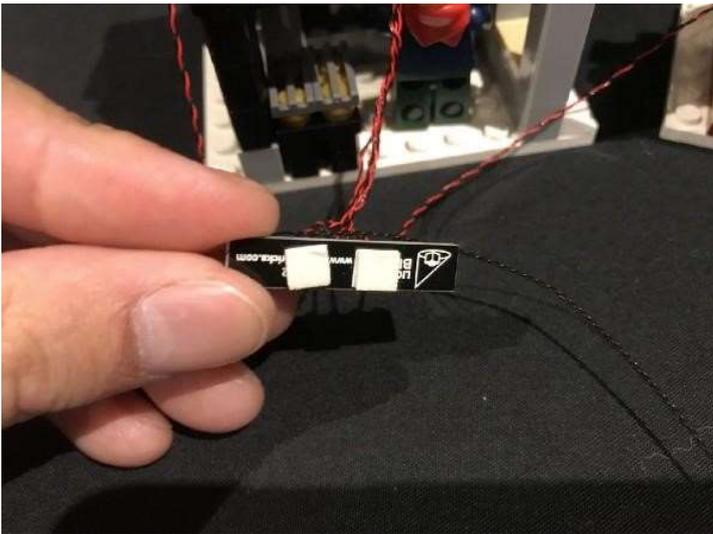
10.) Take the 30cm Connecting Cable and connect this to one of the spare ports.



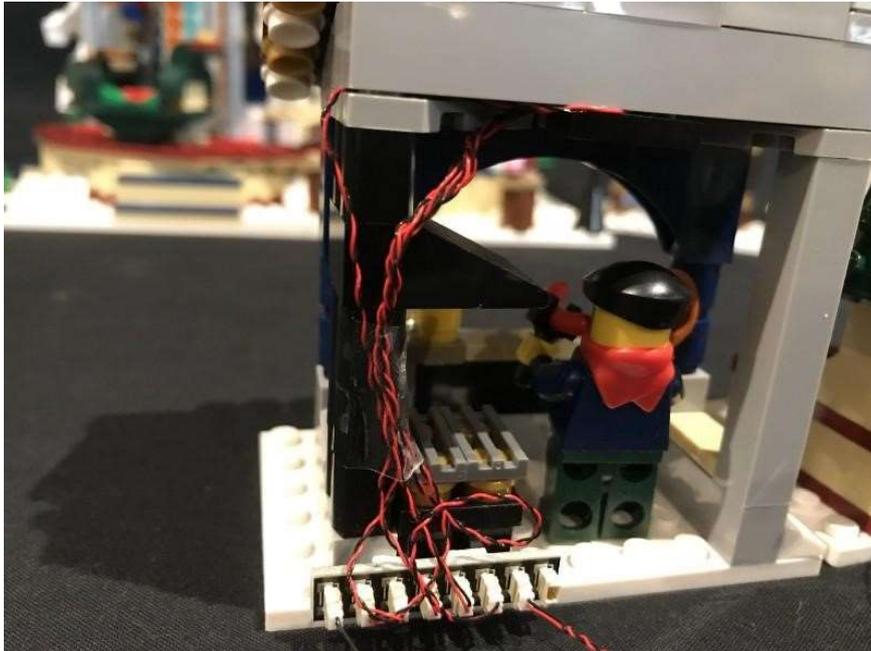
Turn the Candy Stand around and place it to the right of the Chicken Stand. Connect the Bit Light from the Candy Stand to the expansion board



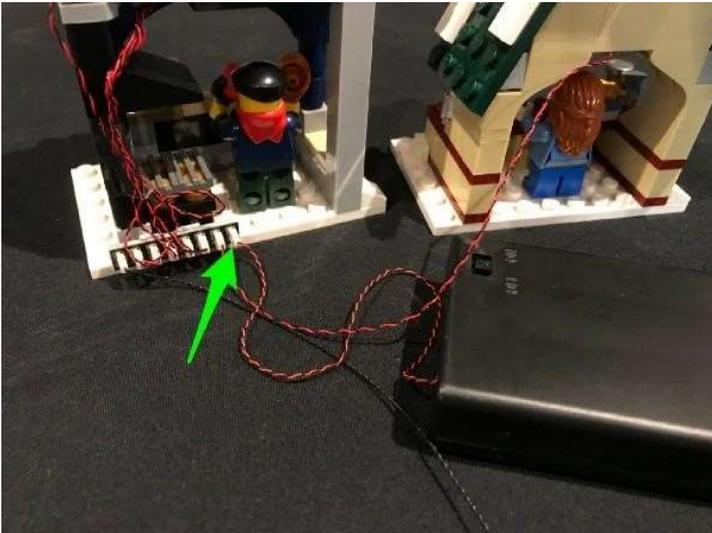
Using 2x Adhesive Squares, mount the expansion board to the base of the Chicken Stand as positioned below:



Use tape to secure cables to the back of the chicken stand.

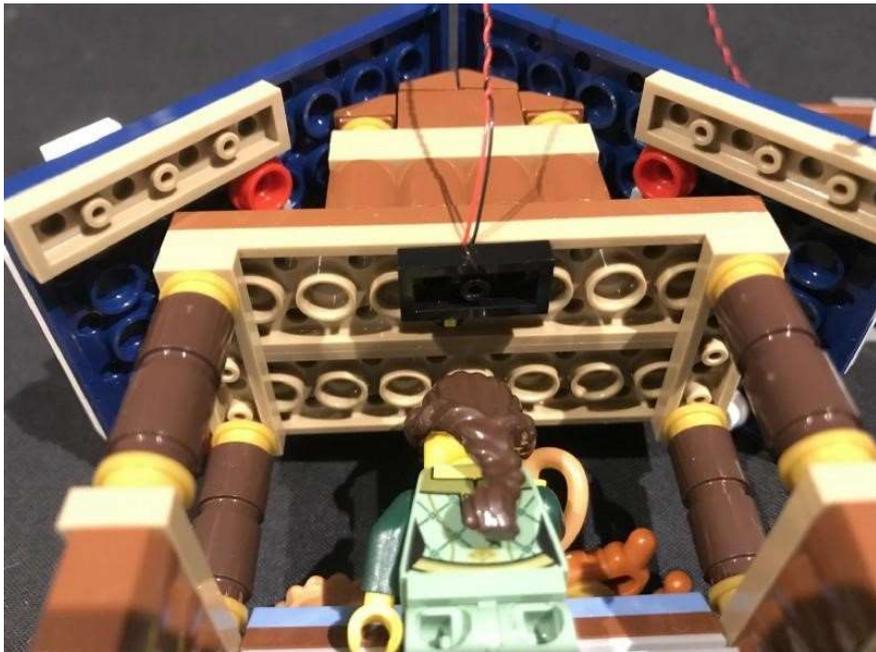
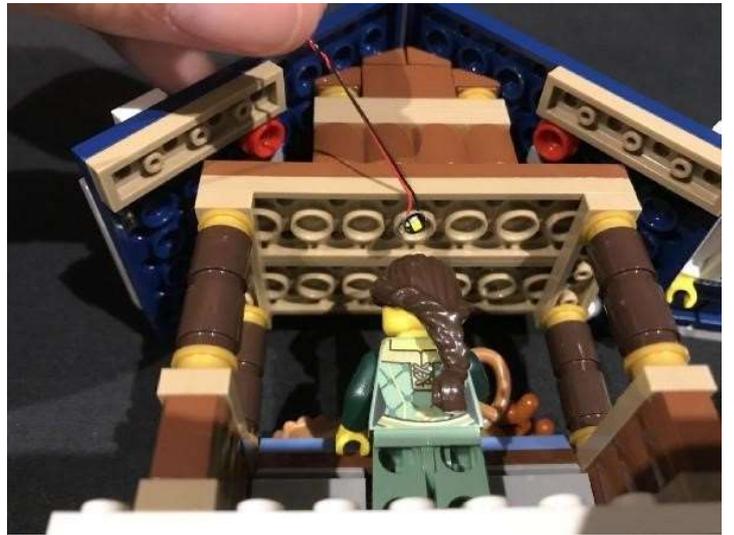


Test your current lighting circuit so far by taking the AA Battery Pack and inserting 3x AA Batteries inside. Connect the battery pack cable to the expansion board and turn it ON to verify all is OK

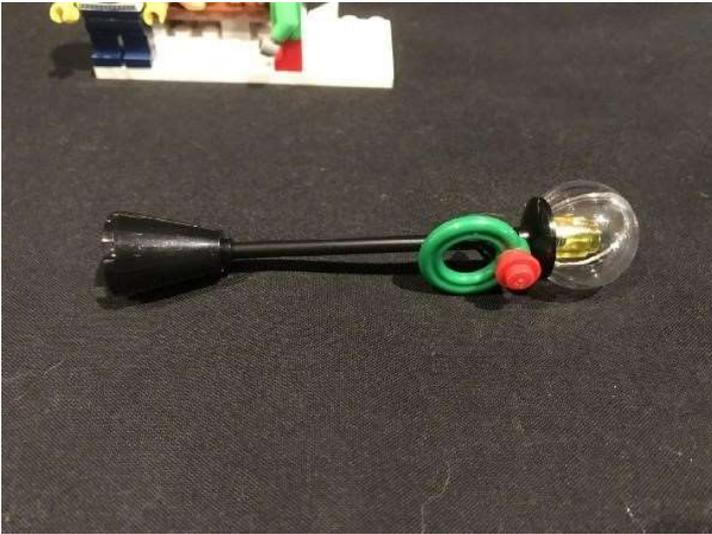


Once you have confirmed all the lights are working OK, disconnect the AA Battery Pack and proceed to the next step

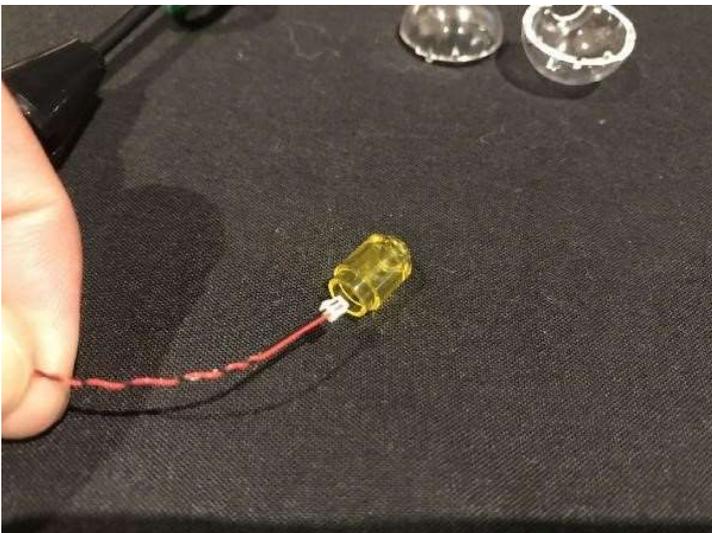
- 11.) We will now install lights to the two right sections of the WinterVillage Market. Starting with the pastry stand, turn it around and then take a White 30cm Bit Light and place it underneath the roof in the below position. Secure it in place using a provided LEGO 1x2 Plate.

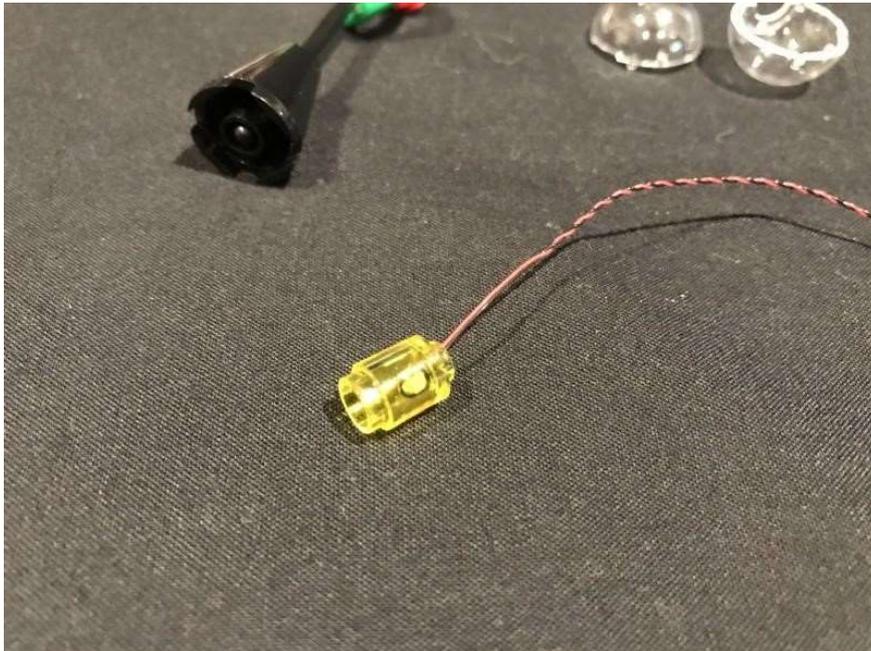


12.) Take the section with the bench and lamp post and disconnect and disassemble to lamp post as per below:

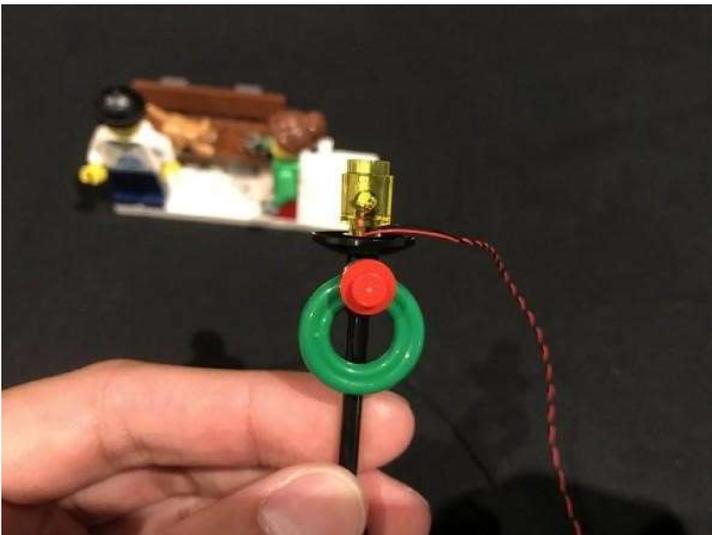


Take a White 30cm Bit Light and thread the connector side through the base of the trans yellow brick (larger hole) and out through the smaller hole. Thread it all the way through until the LED component is right inside the brick.

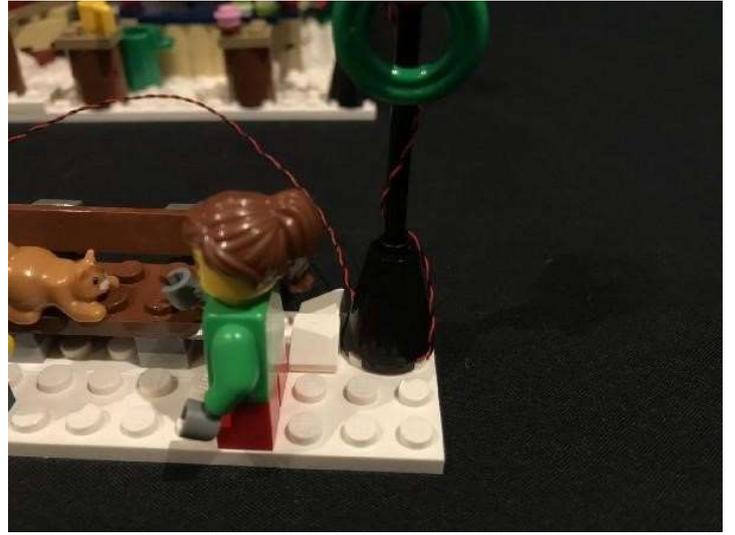
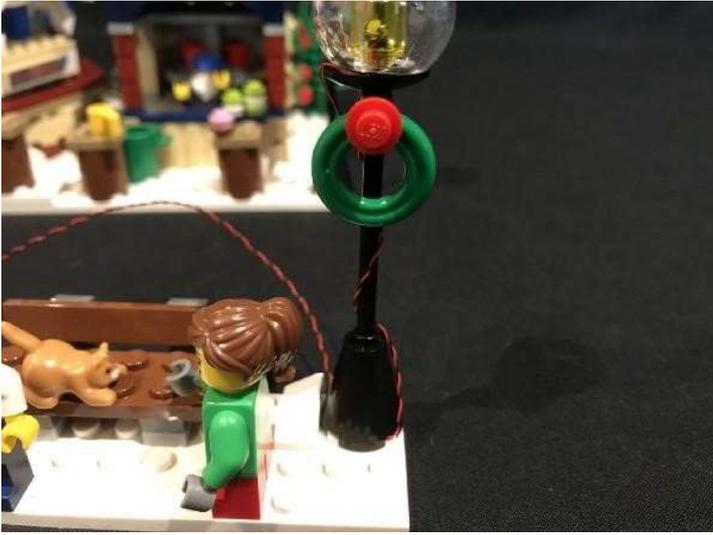




Reconnect the trans yellow brick to the lamp post and then reconnect the outer trans clear bulb pieces.

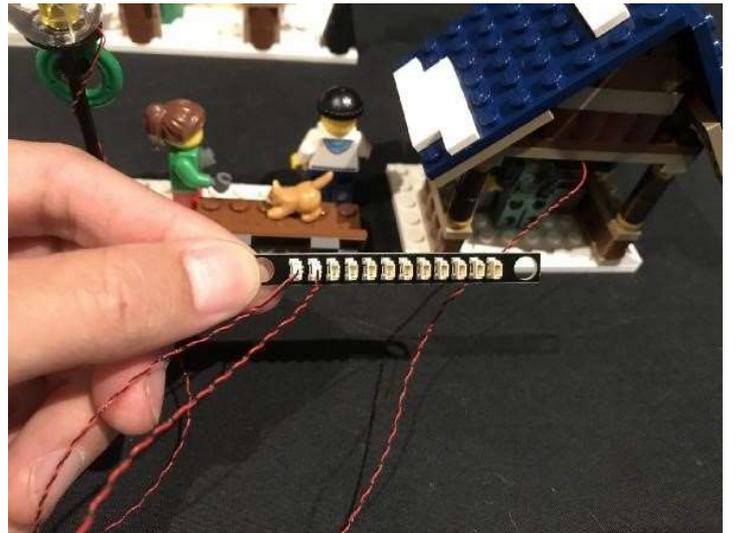


Wind the Bit Light cable around lamp post pole toward the bottom and then secure underneath the base of the lamp post as per below:



Ensure the cable is laid in between LEGO studs.

13.) Turn both sections around and then take the 12-port Expansion Board and connect both cables to spare ports.

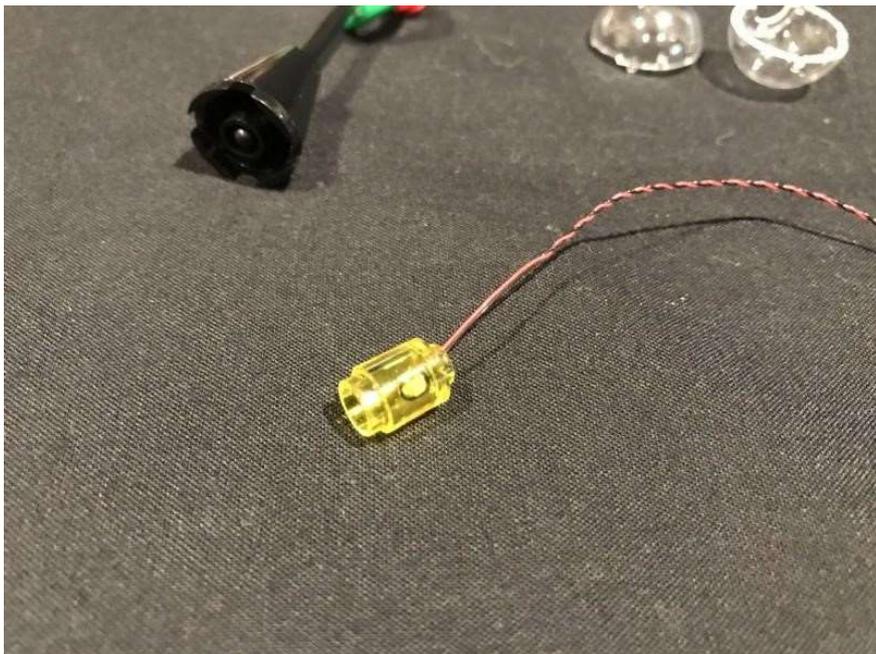
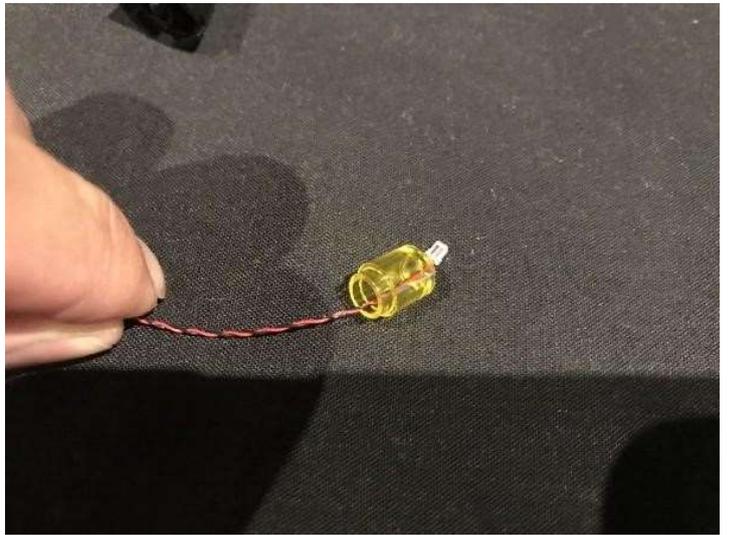
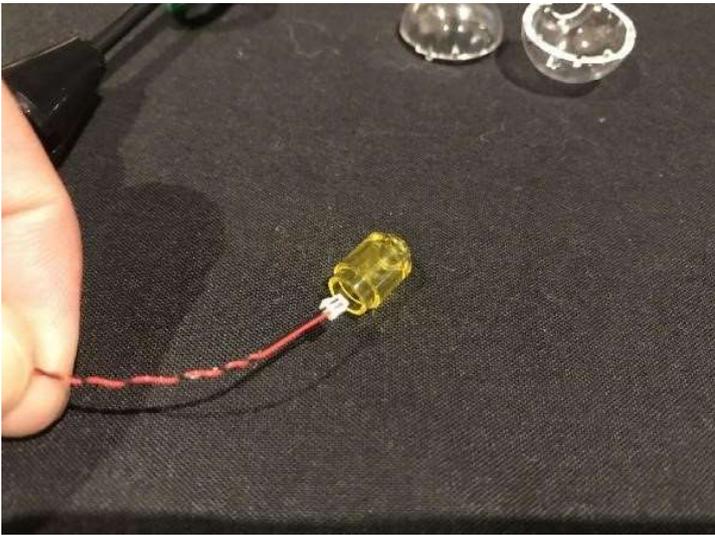


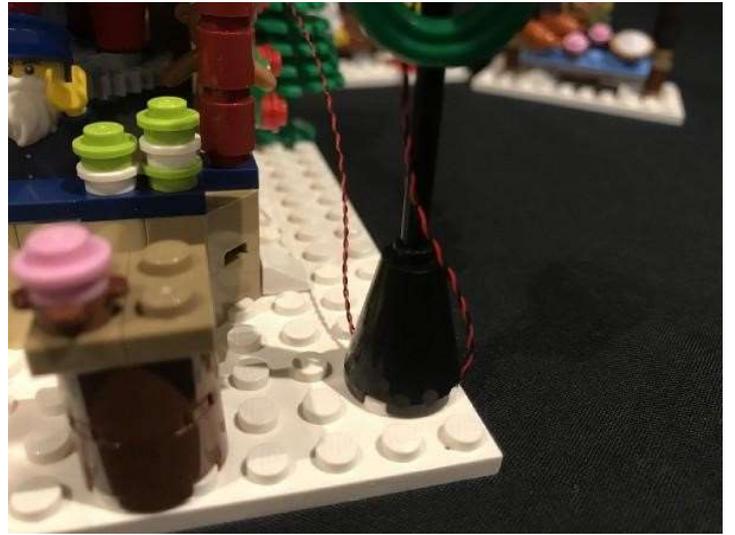
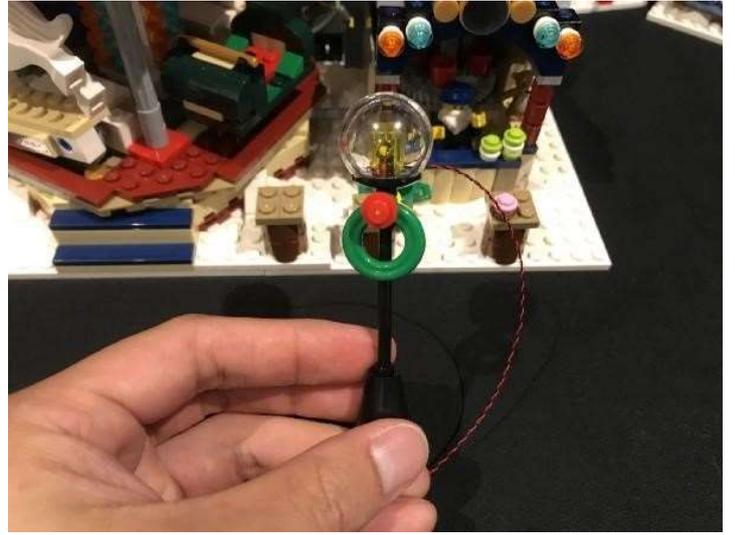
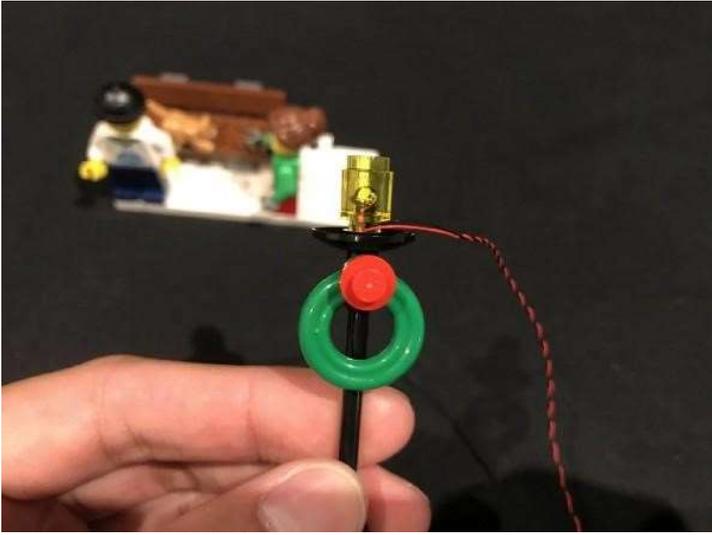
Re-position the two sections as per below.



14.) We will now install a light to the lamp post in front of the hotchocolate/ticket stand. Remove this lamp post and the follow the process used in step 12 to install another White 30cm Bit Light.







Ensure the cable is laid in between LEGO studs

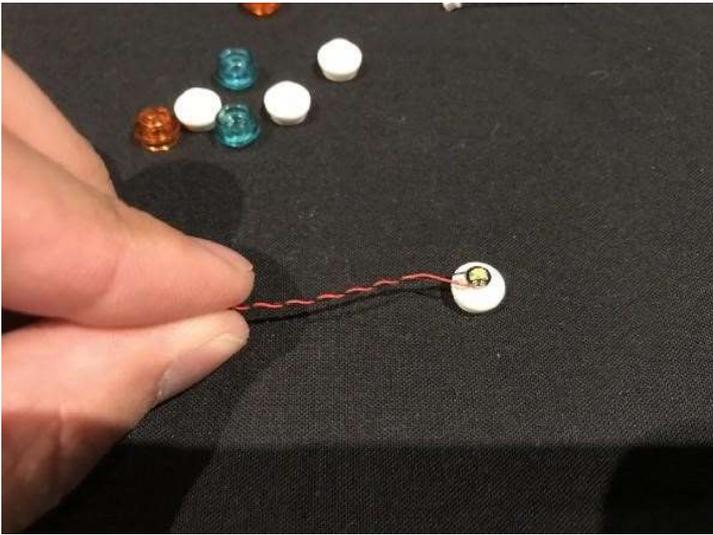
- 15.) Pull the lamp post cable toward the back and ensure it is laid inbetween studs. Secure it down by reconnecting the Tree over the top.



16.) We will now install flashing lights to the roof of the hotchocolate/ticket stand. First disconnect the round pieces (both white and trans coloured) and then disassemble them as per below:



17.) Take a Flashing White 15cm Bit Light and place it directly over the stud of one of the white round plates. Secure the Bit Light in place by reconnecting a trans coloured plate over the top.



Repeat this process to install another 3x Flashing White 15cm Bit Lights.

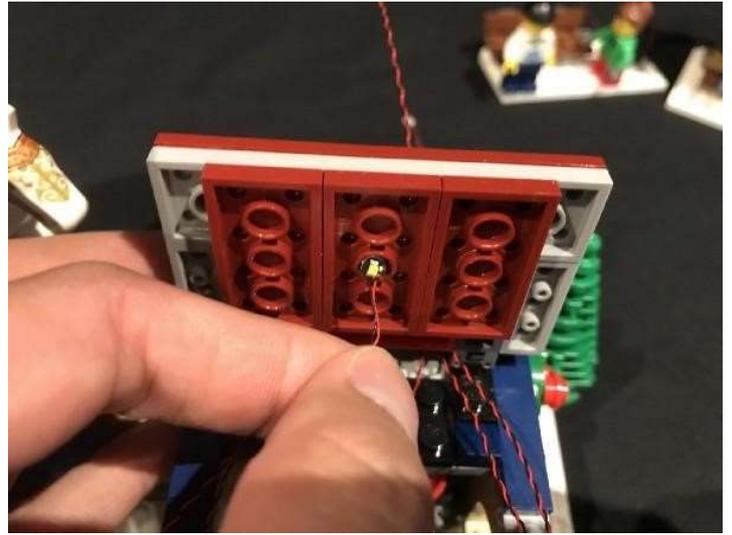
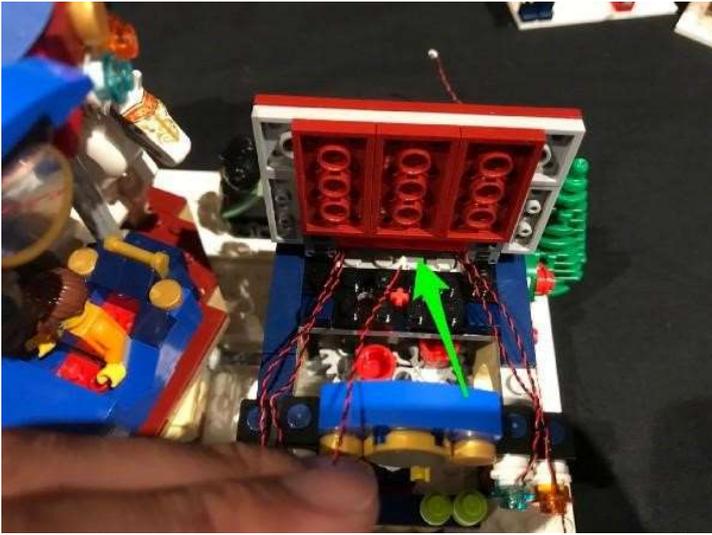


18.) Remove the top section of the roof and then reconnect the roundpieces (with flashing bit lights installed) in the following order (and with the cables facing up).



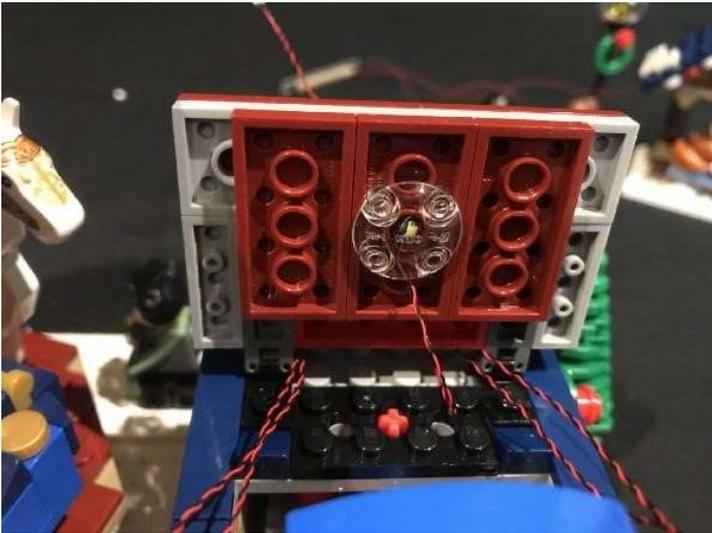
19.) Lift the roof of this stand up and then group the 2x Flashing BitLight cables from each side together before threading through the inside space that leads to the back side. Thread the cables all the way through and then reconnect the top section.



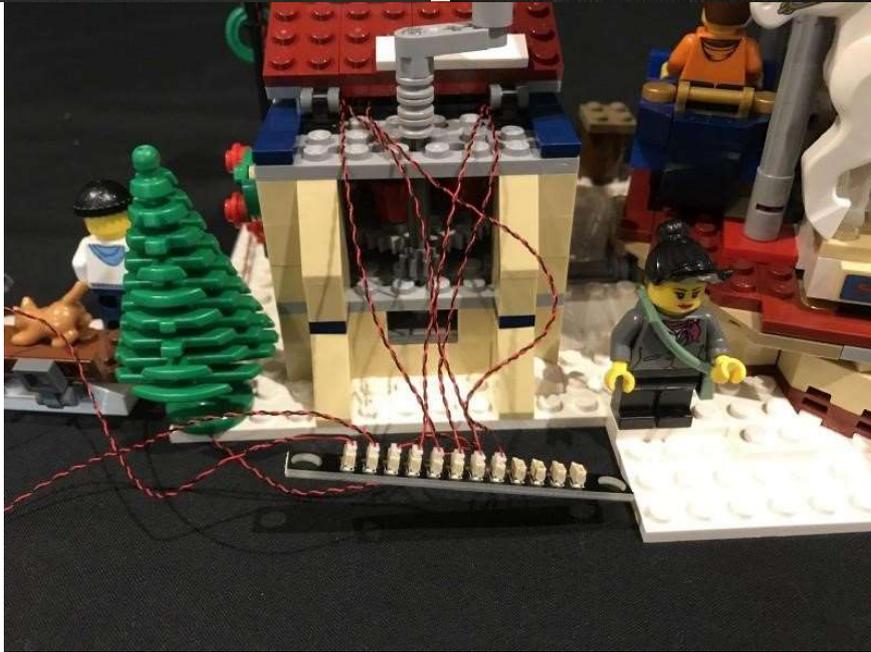
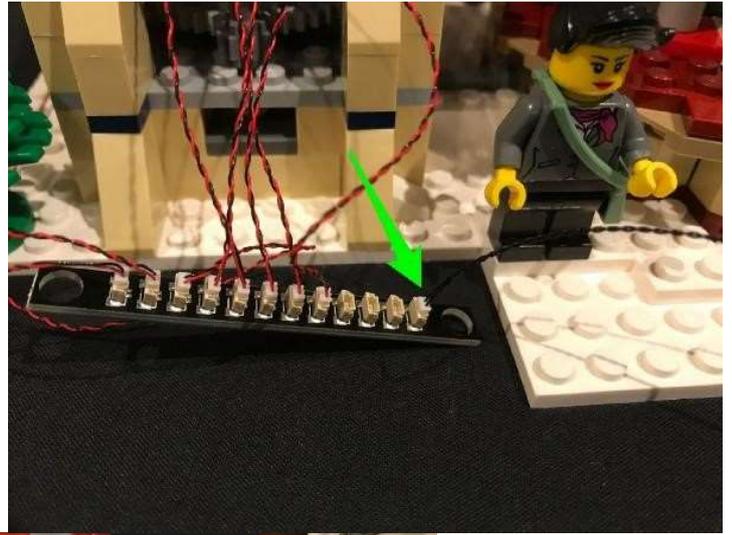
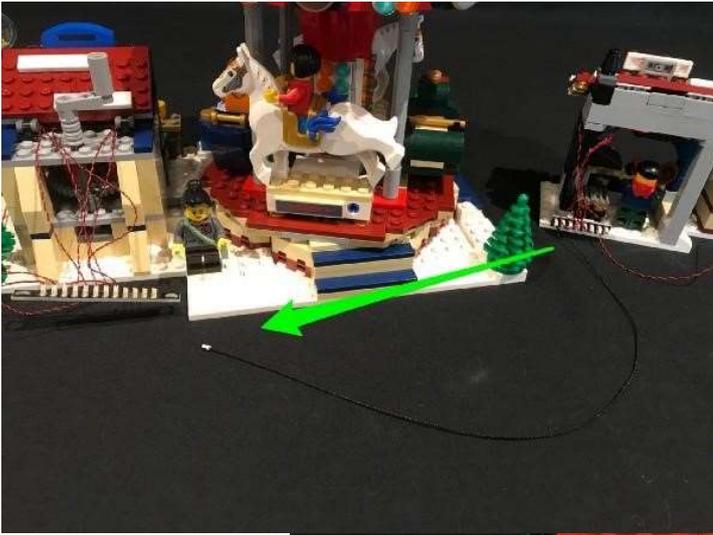


20.) Take a White 15cm Bit Light and then thread it through the space inside the roof that leads to the back side. Thread the cable all the way through and then place the LED component in the below position:

Secure the Bit Light in place using the remaining provided Trans Clear 2x2 Plate with Rounded Bottom then close up the roof.

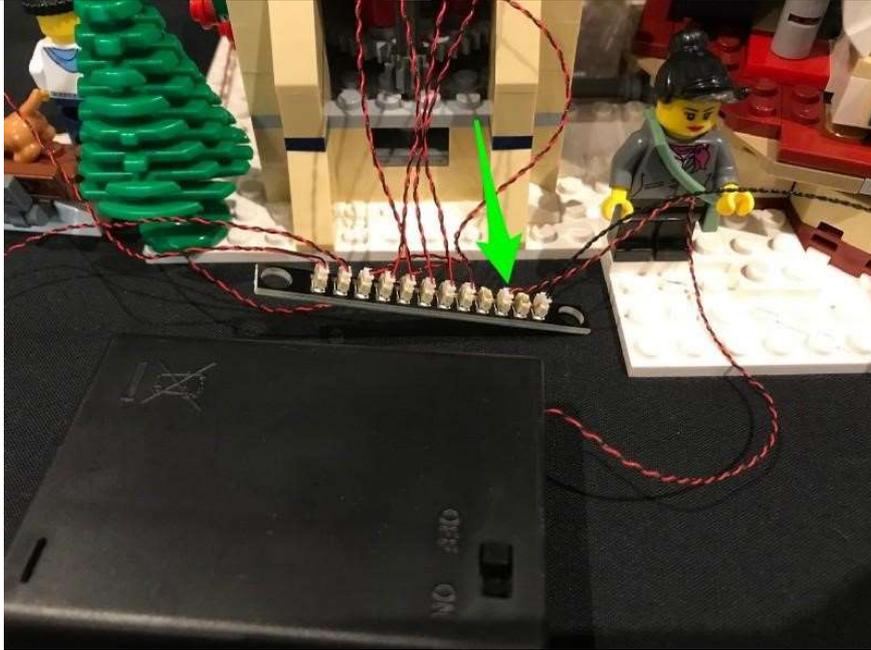
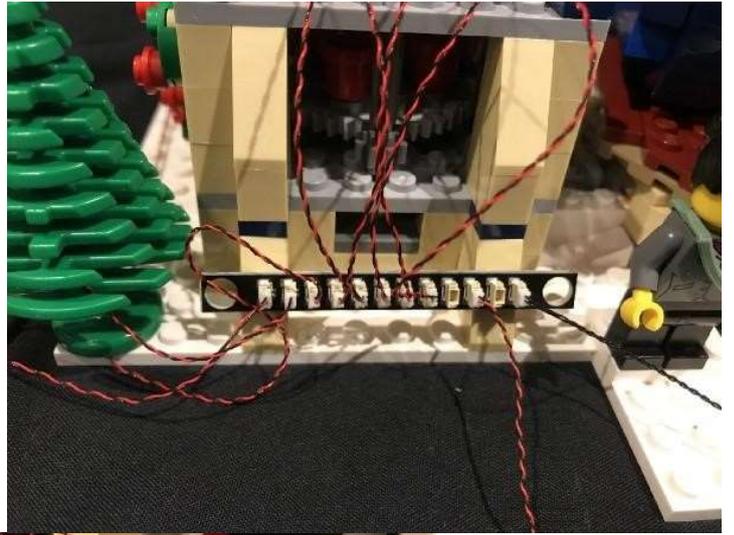
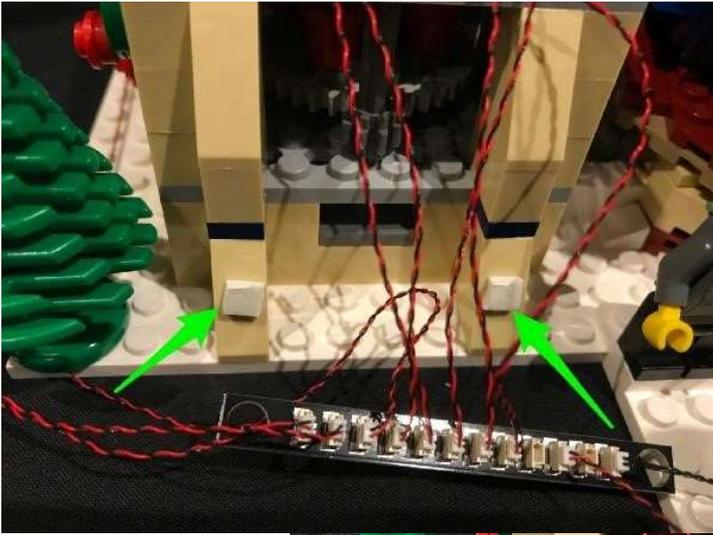


21.) Turn this section over to the back and then place the Pastry Stand and Park Bench/Lamp Post section to the left as per below. Connect the lights from the hot chocolate stand and lamp post to the 12-port Expansion Board.



22.) Pull the 30cm Connecting Cable from the right side over and connect this to the 12-port Expansion Board.

23.) Take the AA Battery Pack and connect it to one of the spare ports on the 12-port expansion board.



24.) Stick 2x Adhesive Squares to the base of the back of the hot chocolate and then mount the 12-port expansion board as per below:

Neaten up cabling as best you can to prevent it from looking messy from the front, then test your current lighting circuit by turning the AA Battery Pack 'On' and ensure all is working OK.



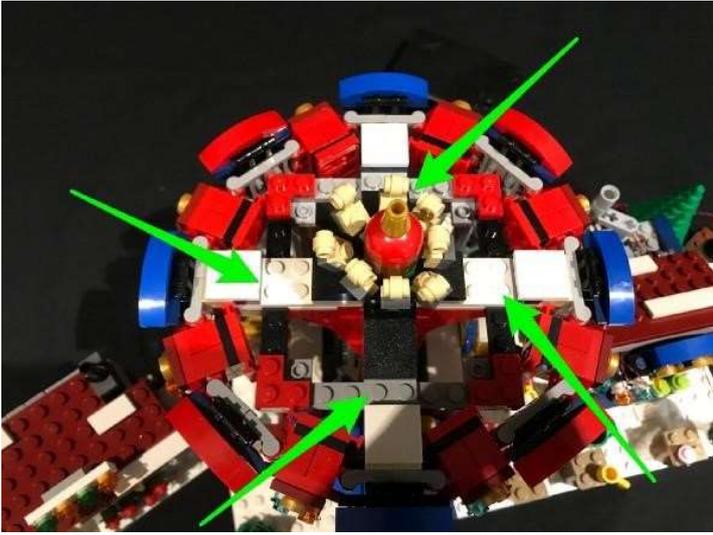
25.) We will now proceed to lighting the carousel. First remove the blue and white roof panels as per below.

26.) Take 4x White Strip Lights and then connect them all together using 3x 5cm Connecting Cables

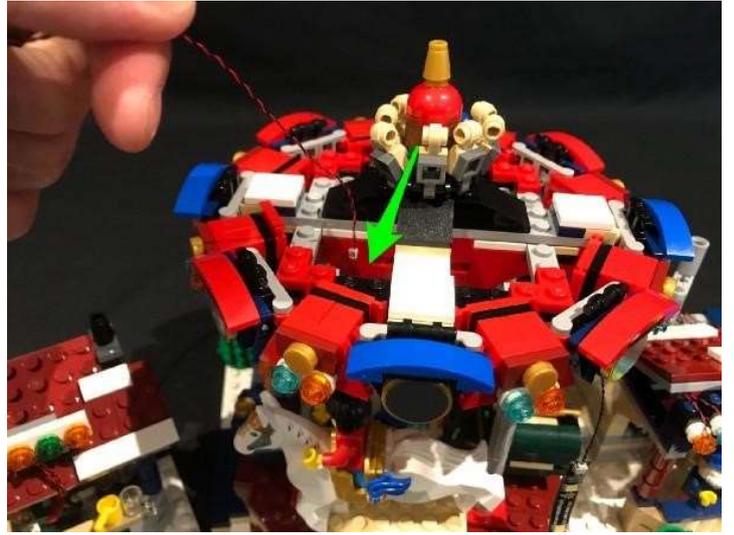


27.) Using the adhesive backing on the strip lights, mount each one (but leave the 4th one unmounted for now) underneath the roof of the carousel in the below positions.





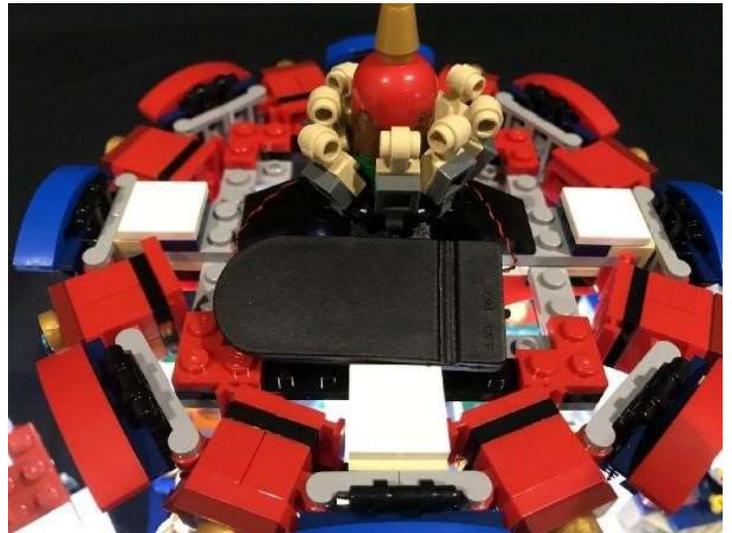
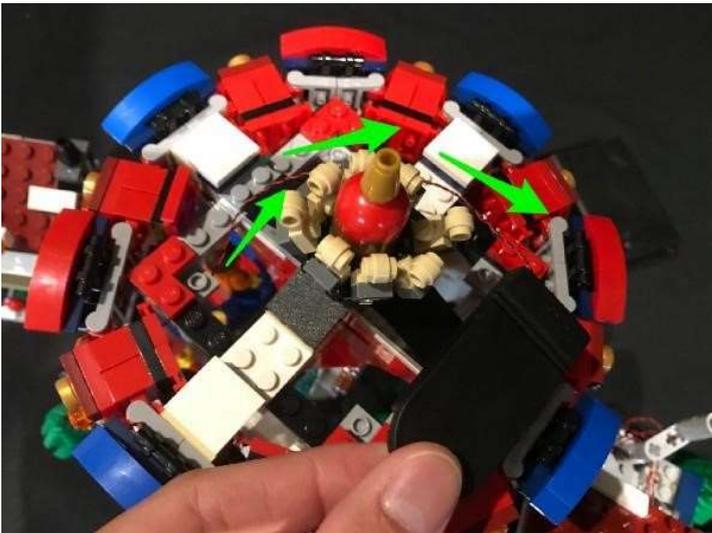
28.) Take the Flat Battery Pack and insert 2x CR2032 batteries. Thread the battery pack cable down the top of the roof and then pull the cable out from underneath. Connect this cable to the end port of the strip light we left unmounted.



Mount the nal strip light



From the top of the carousel, pull the battery pack up to remove excess cable from dangling down and then wind the cable around the middle pole. Place the Battery Pack neatly on top.



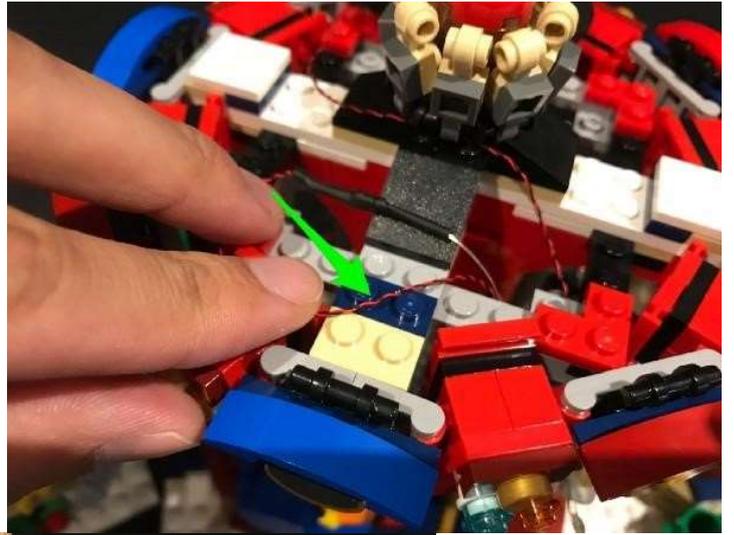
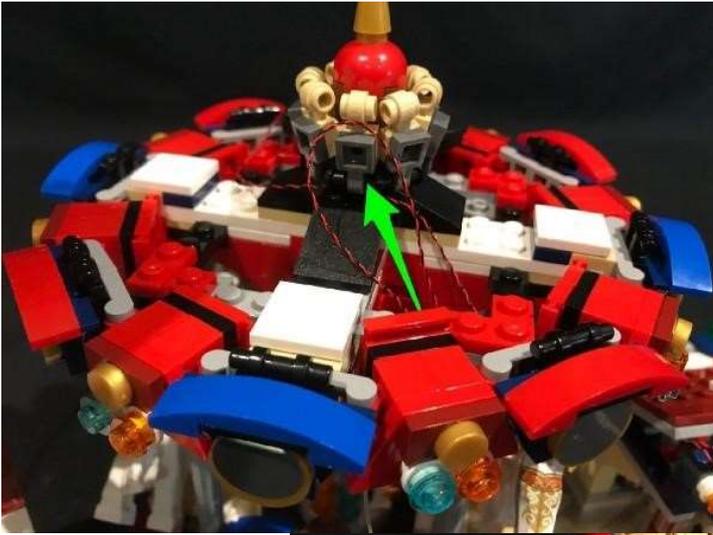
Turn the battery pack on to test the strip lights are all working OK.



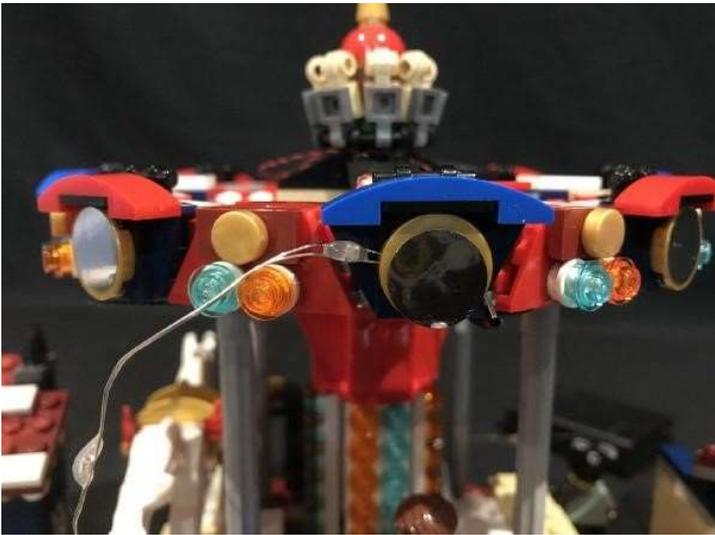
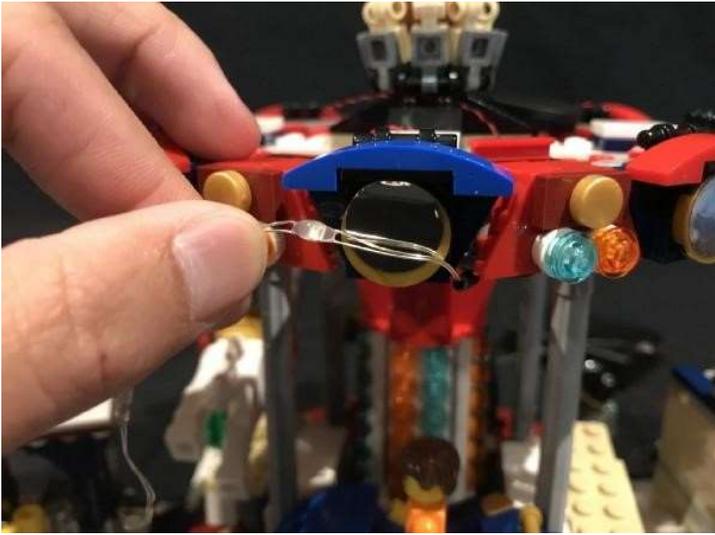
29.) Take the Multi-Colour Changing Light String and then connect it to the end port of the other outside strip light.

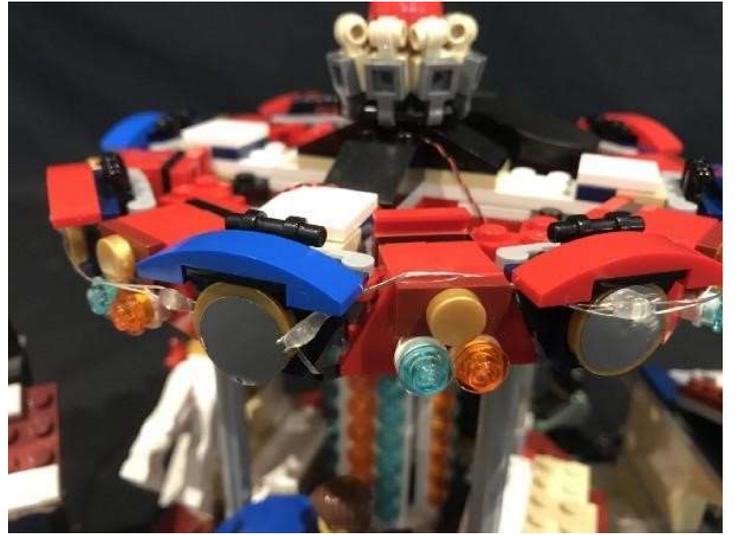
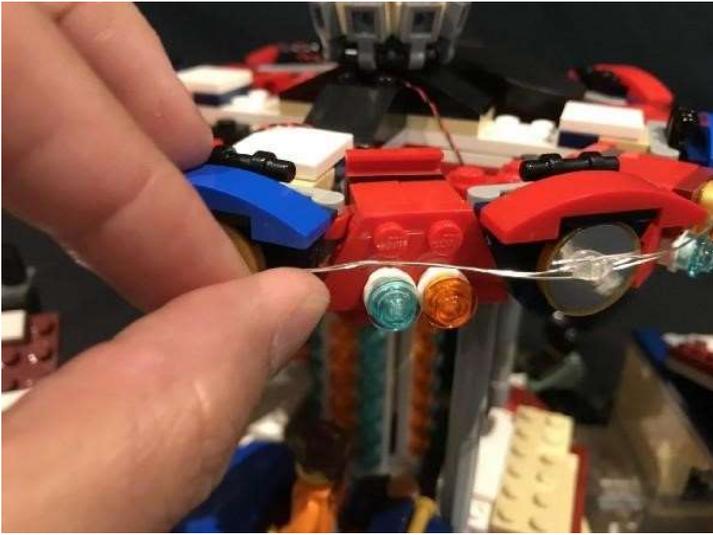


Pull the connector end of the Multi-Colour Changing Light String cable up slightly from the top to prevent excess cable from dangling. Secure it down underneath the below LEGO white tile.



- 30.) Pull the rest of the Light String around the outside carousel securing them underneath the mirror pieces and 1x2 plates as pictured below. The length of the light string should cover the whole outside of the carousel.

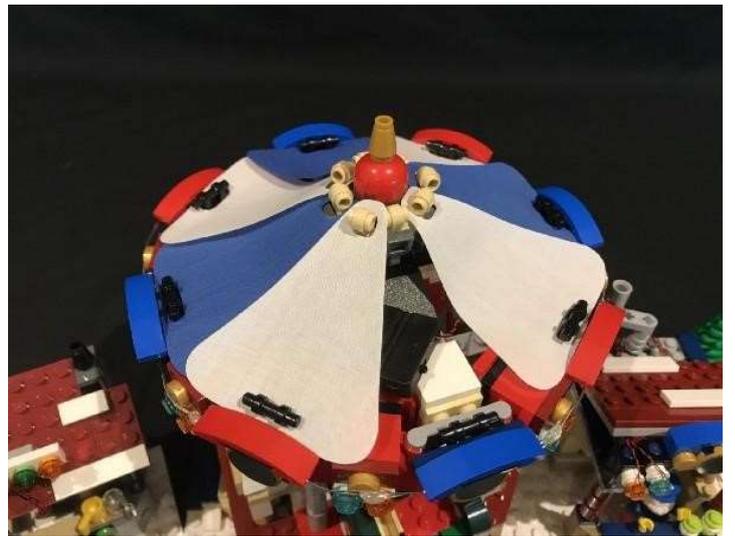




31.) Turn on the battery pack to test all lights in the carousel are working OK.



32.) Reconnect the roof ap pieces in order from left to right.



To access the battery pack, simply lift the ap closest to the battery pack up.

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This nally completes installation of the Light My Bricks Winter Village Market Light Kit. Now turn 'ON' your light kit at both battery packs and ENJOY!

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