

## Lighting Kit LEGO 10277

Thank you for choosing Vonado lighting products. We are committed to LEGO product study and lighting development, and we're always trying our best to provide LEGO fans with the best products and the best installation ideas.

Must be careful observation, imagination can be infinitely.

We provide basic parts to support your imagination.

DO IT YOURSELF .that's what LEGO is .

As always, Lego has been adhering to the DIY philosophy from product selection, research and development to sales. Consumers buy the parts, you will assemble them by yourself, and you can experience every step from picking up the first piece to installing the last one. Besides, LEGO has different answers for the installation form and method of each part. Vonado lighting also does not want to kill your unlimited creativity, we will try our best to make products with high variability, high playability and unlimited play. If you have any dissatisfaction or your own ideas on the parts such as the color of the lights, the length of the cables, the installation position of the product, and the final effects of each module, you can make your own arrangement, and we will cooperate with you to replace or repurchase.

LETS MOVE!

### Package contents:

- 4 x 30cm White Dot Lights
- 1 x 15cm Warm White Dot Light
- 2 x 30cm Warm White Dot Lights
- 2 x 30cm Head Lights
- 2 x 15cm Head Lights
- 1 x 15cm Connecting Cable
- 1 x 8-port Expansion Board
- 1 x 6-port Expansion Board
- 1 x Round Coin Cell Battery Pack

Extra pieces

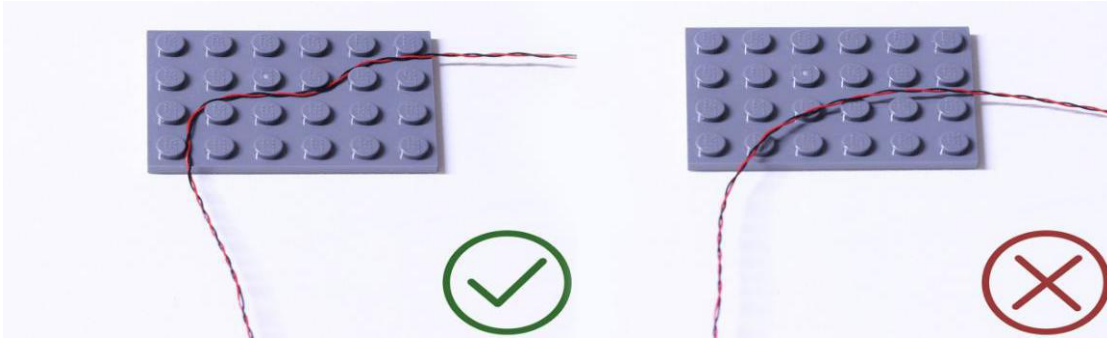


(Product Display)

**Note:**

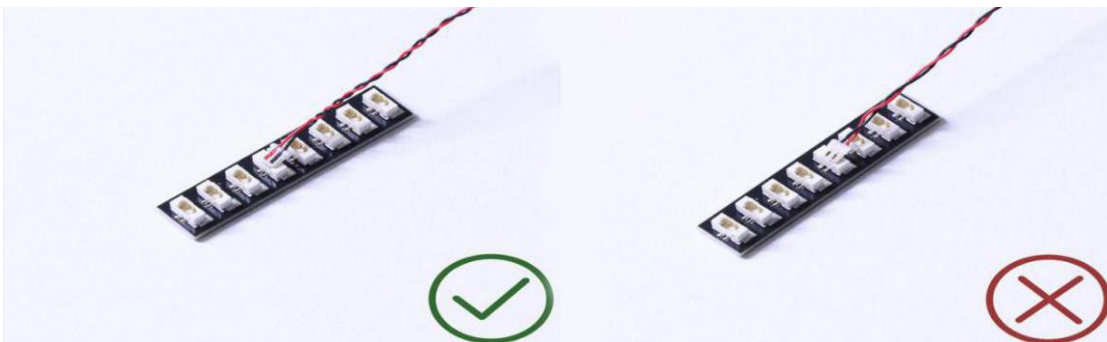
Place wires on the surface or under the building blocks.

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

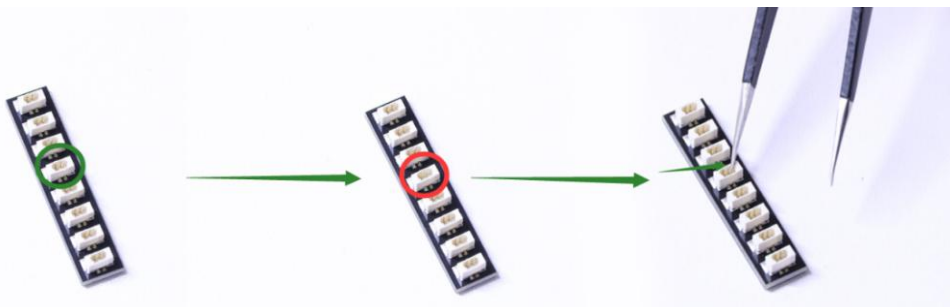


Insert the connectors to the ports.

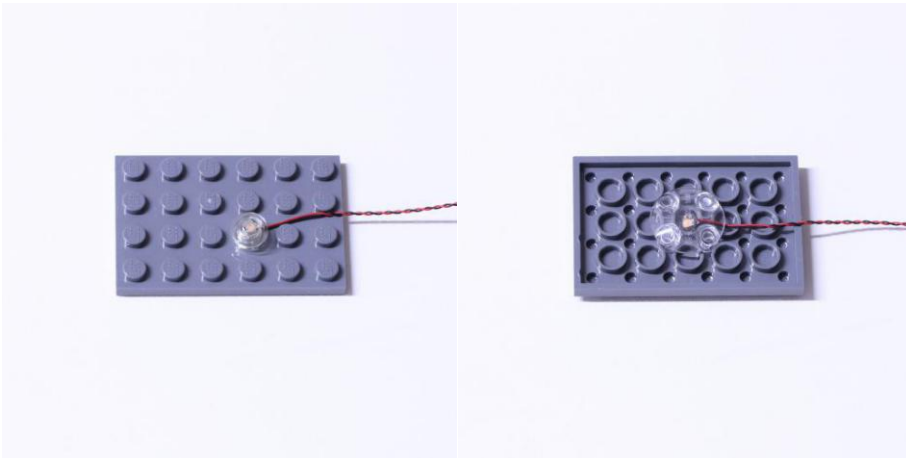
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop,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



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

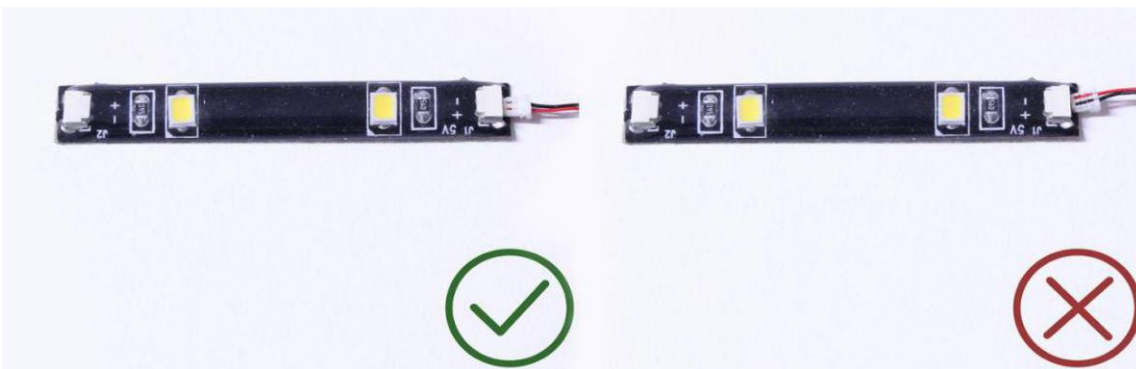


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.



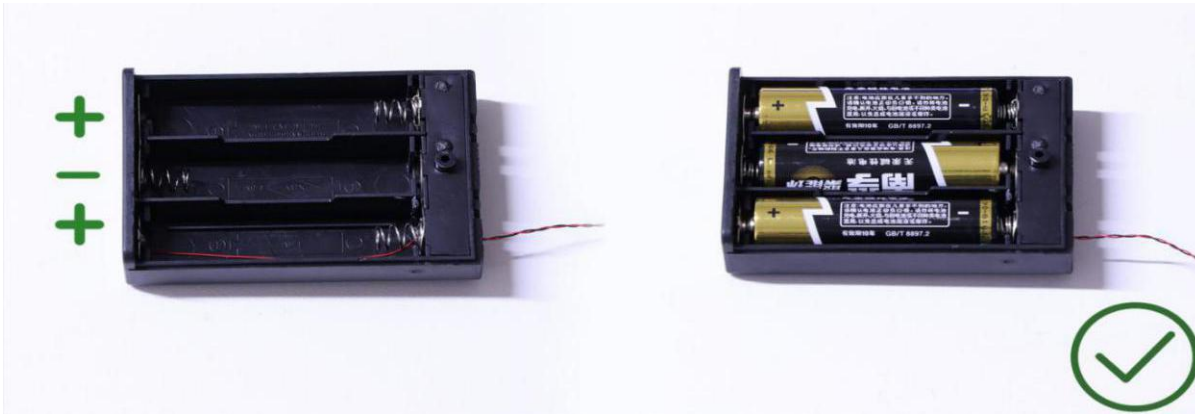
### Connecting cable connectors to Strip Lights

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



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





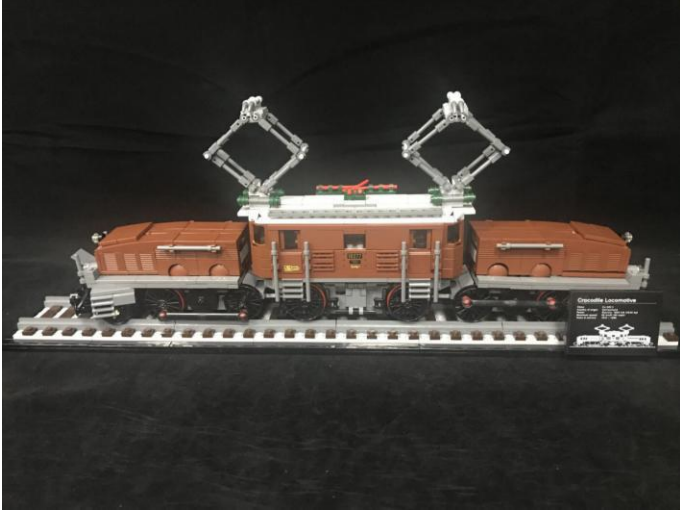
OK, Let's Begin!

## Instructions for installing this kit:

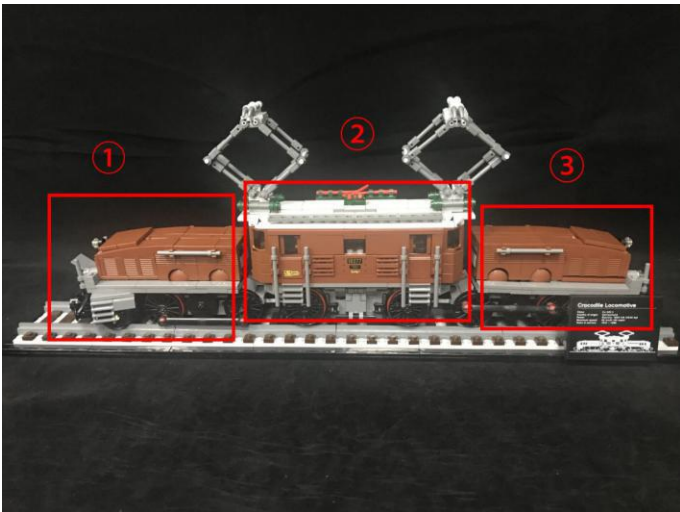
Crocodile Train Lighting Kit, 9 bags in total, 8 bags with labels, 1 bag without label. Power supply: Round Coin Cell Battery Pack (self-contained battery).

OK, Let's Begin! (you can use the tweezers if necessary.)

(Tips: the tweezers are sharp, you should be careful when using them, do not hurt yourself or scratch the pieces; be gentle and do not wear the cables.)



Divide the train into 3 parts.

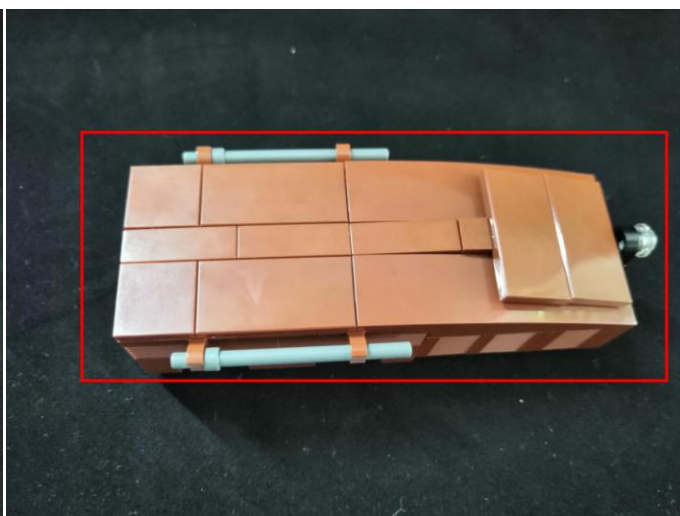
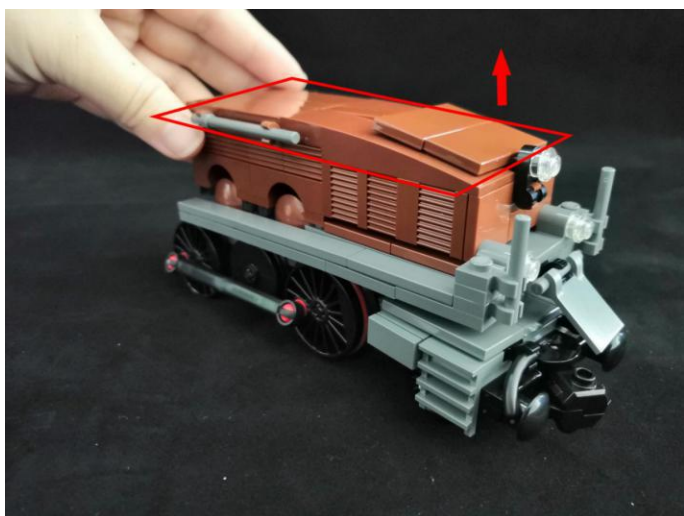


Take the number ① part.

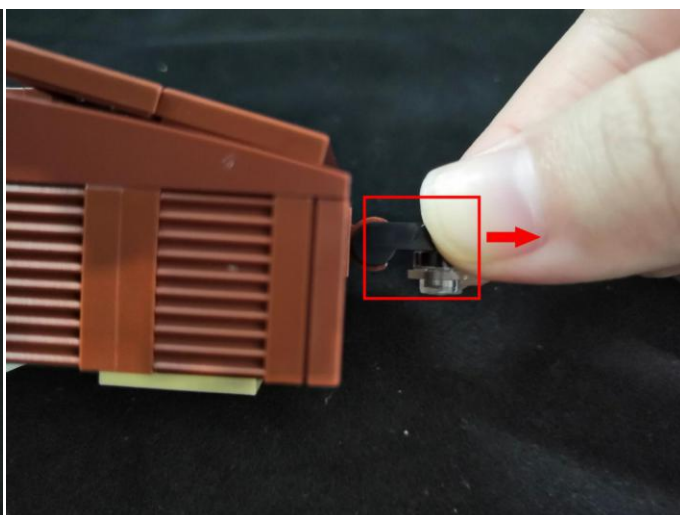
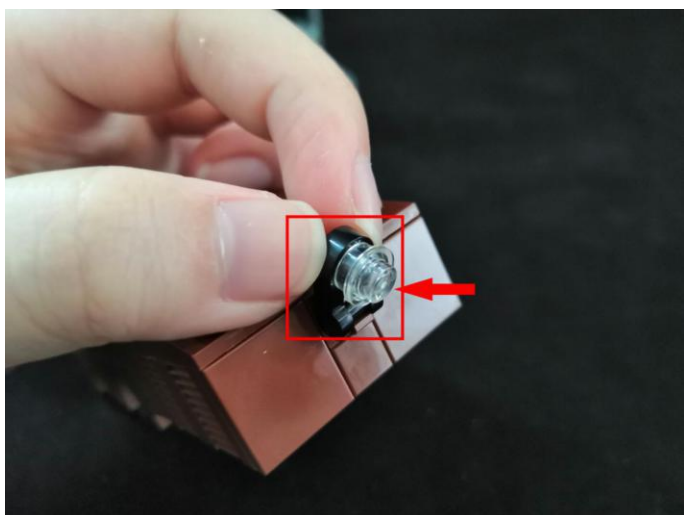




Disconnect the roof.



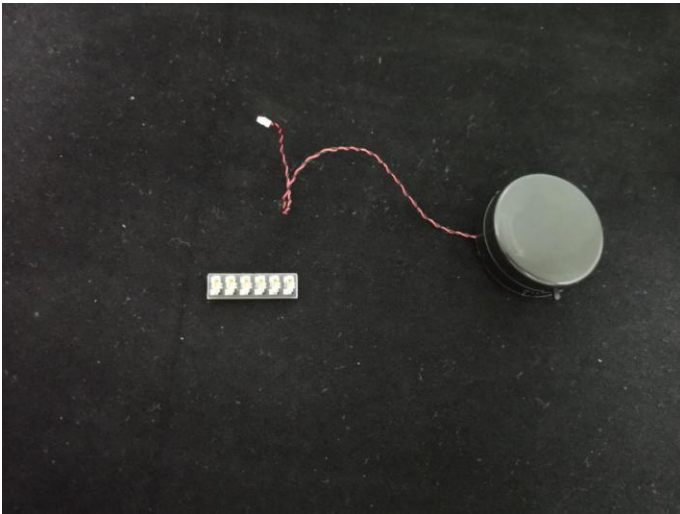
Disconnect the following piece marked in red.



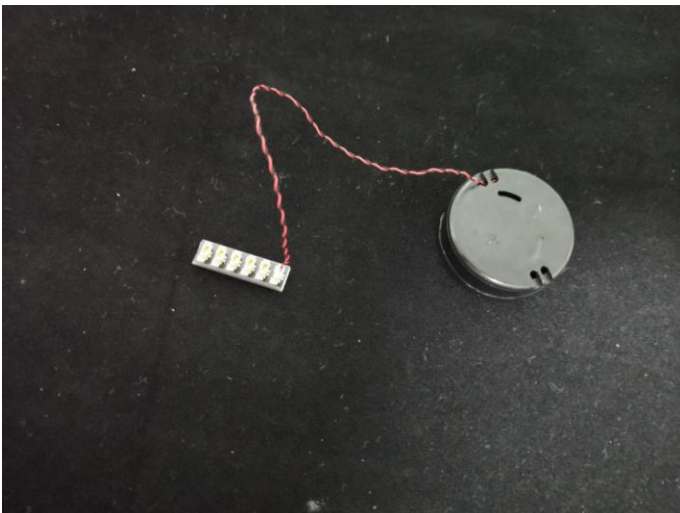
Take a trans round 1x1 plate, a 30cm warm white dot light.



Take the Round Coin Cell Battery Pack, a 6-port expansion board.



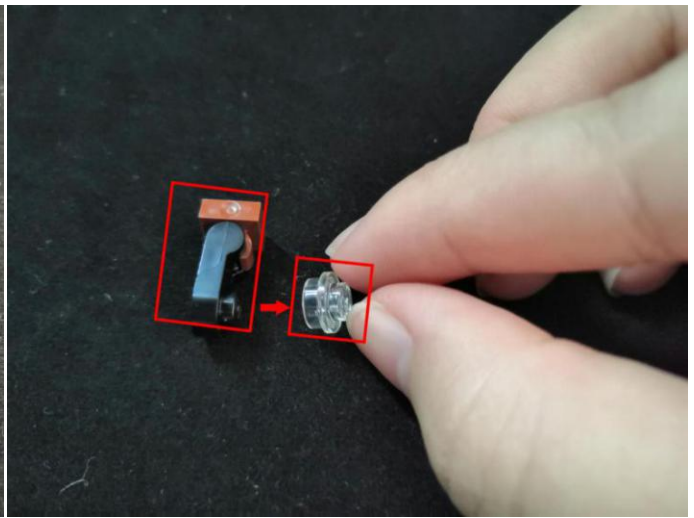
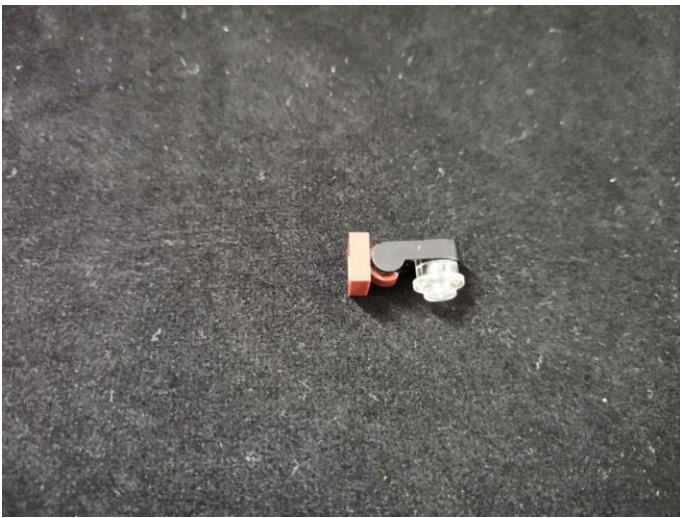
Connect the cable of the battery pack to the expansion board.



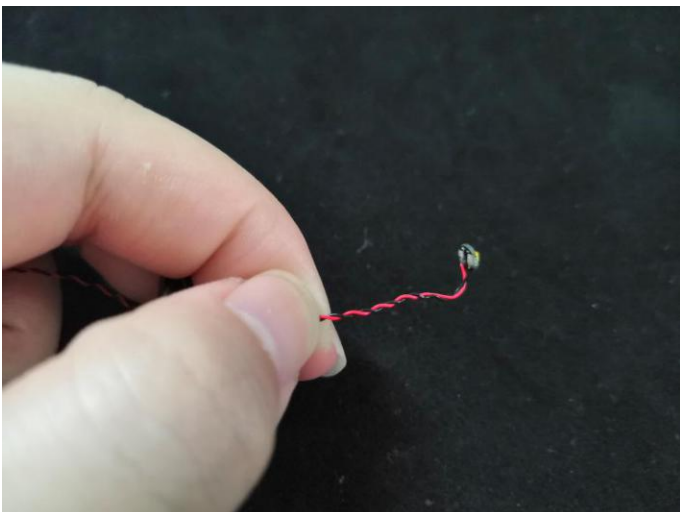
Connect the cable of the dot light to the expansion board, turn the power on to test the light.



(After the test, disconnect the light, leave the battery pack aside.)  
Disassemble the following piece.

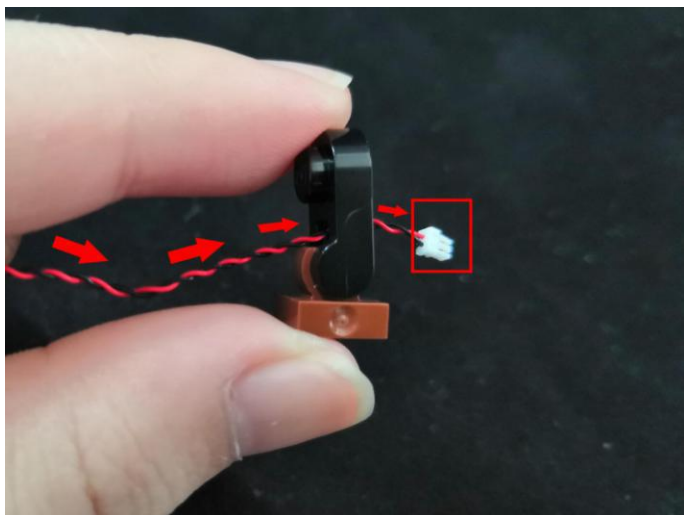


Wind the cable a bit as per below (with lighting part facing outside).



Thread the cable through the following black piece.





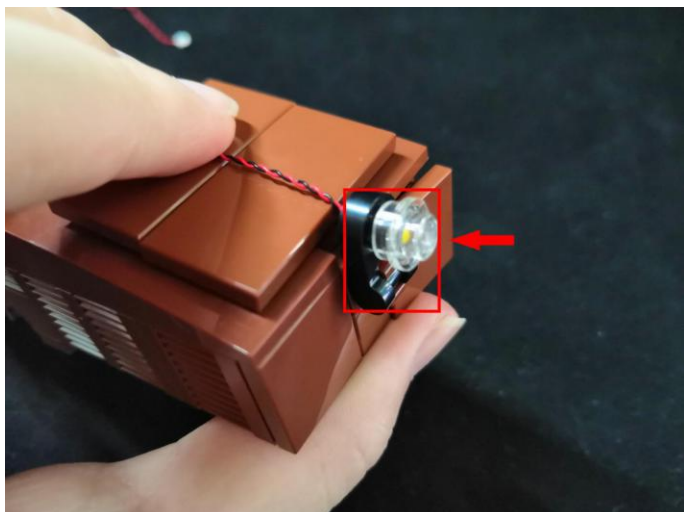
With lighting part facing up, place the light at the following place marked in red.



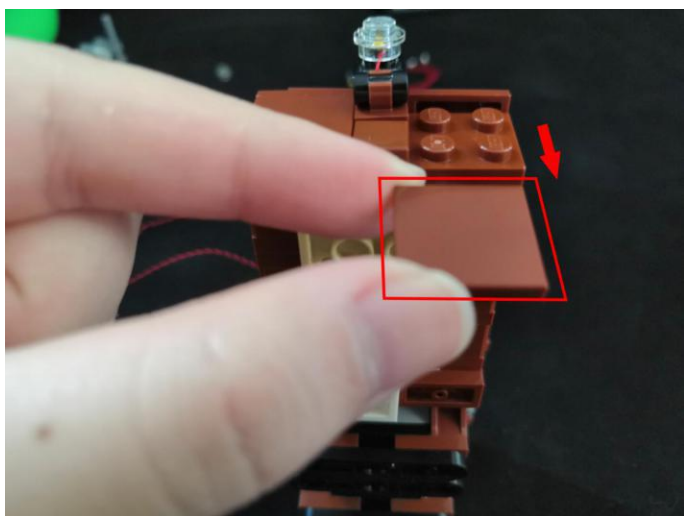
Secure the light with the trans round piece (there' s space between pieces, in case of breaking the cable, do not press the pieces too hard).



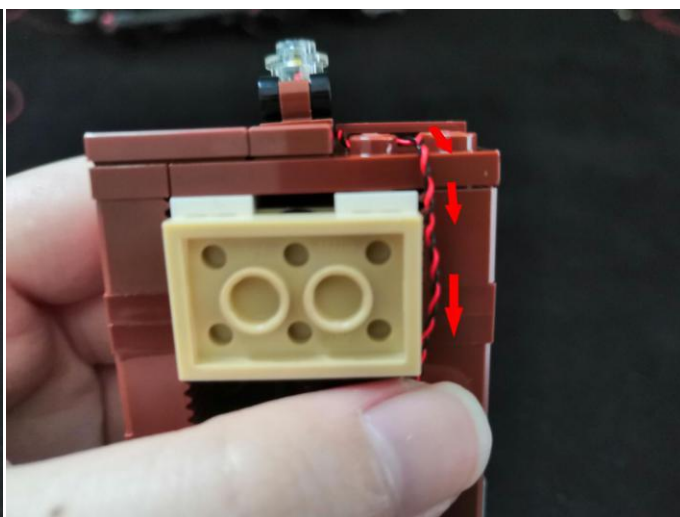
Reconnect the light back on the roof.



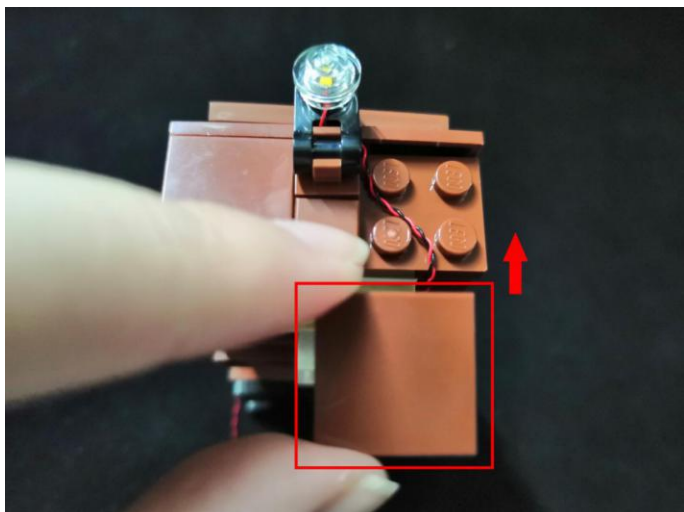
Disconnect the following square piece.



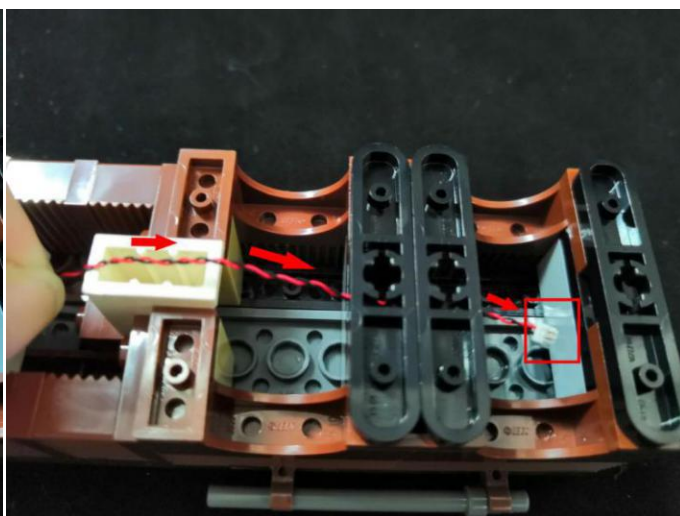
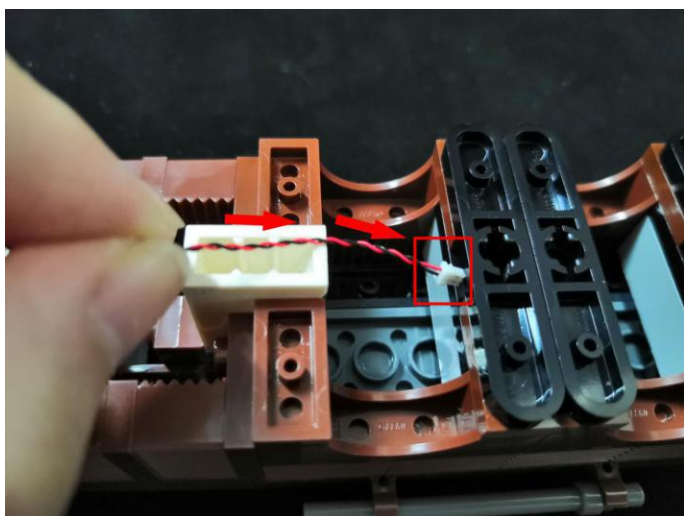
Follow the arrows to place the cable as per below.



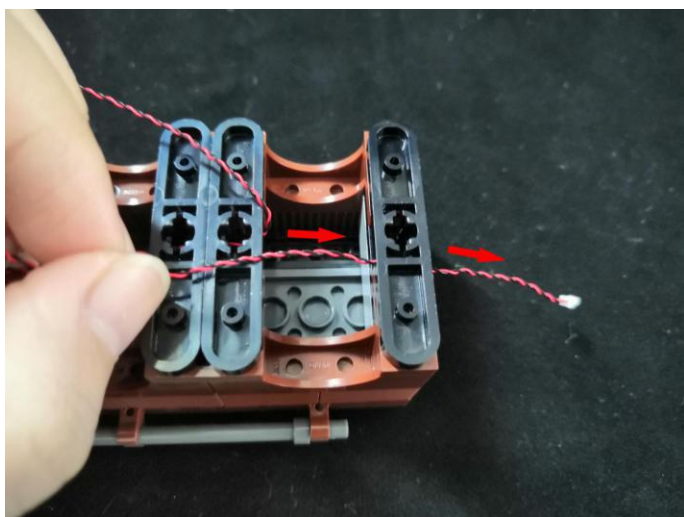
Reconnect the square piece.



Turn the piece over, thread the cable through the following space as per below.



Continue to thread the cable through the following black piece.

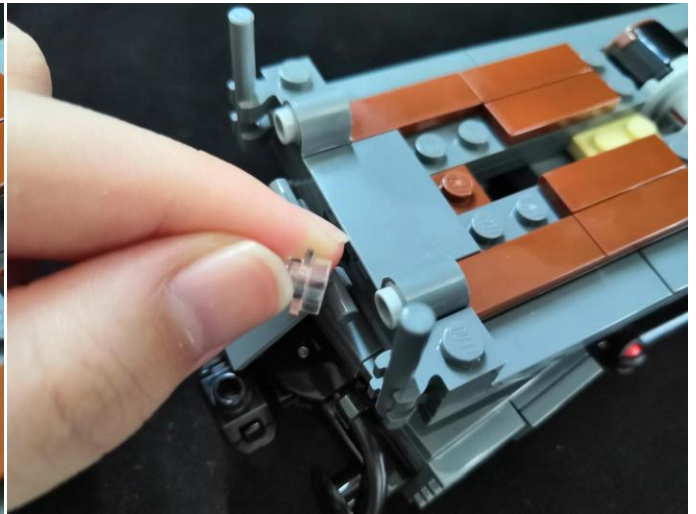
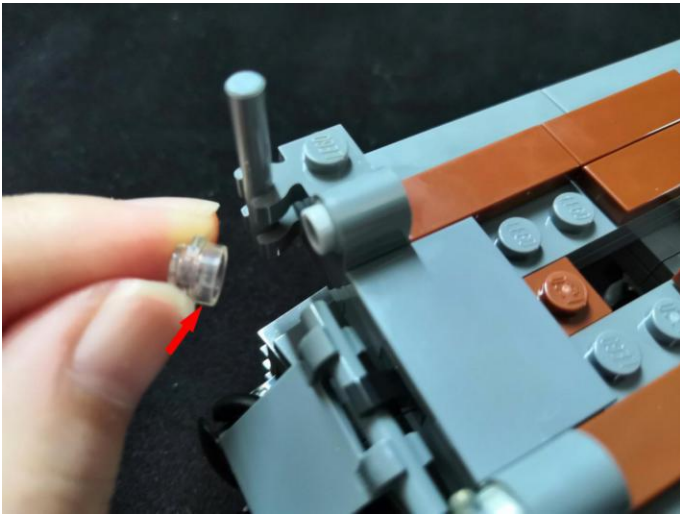


Turn the train to the front.





Disconnect the 2 trans round pieces as per below.



Take 2 trans round 1x1 plates, 2 white 30cm dot lights.

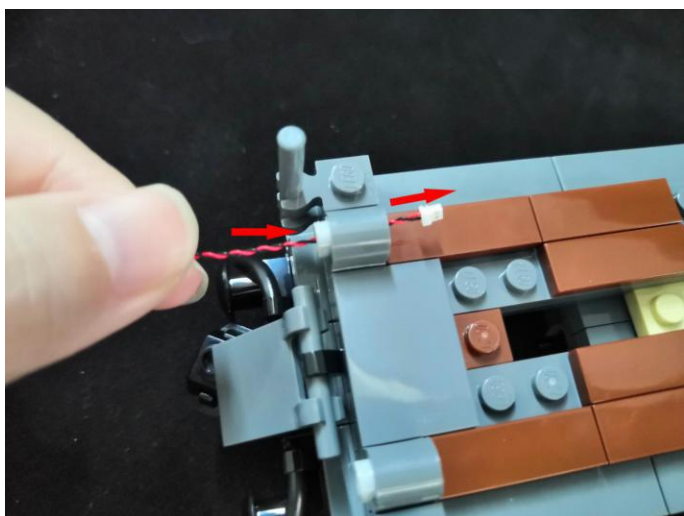


Connect the light to the expansion board, turn the power on to test the light.

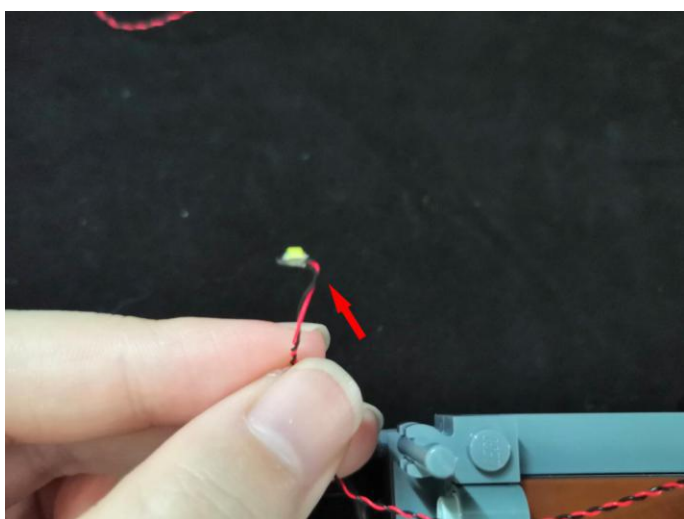




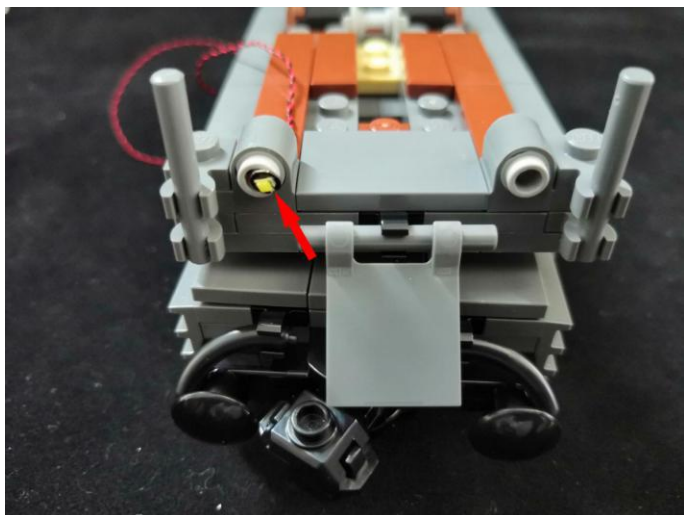
Thread the cable of the light through the white hole at the head of the train.



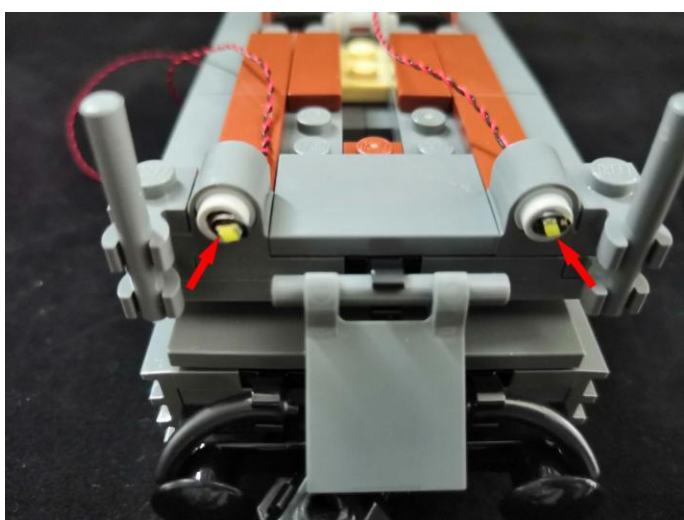
Wind the cable a bit.



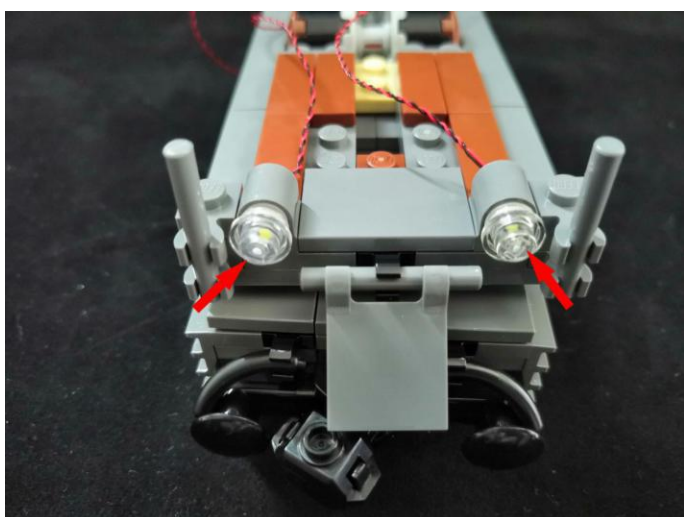
Connect the cable to the following place.



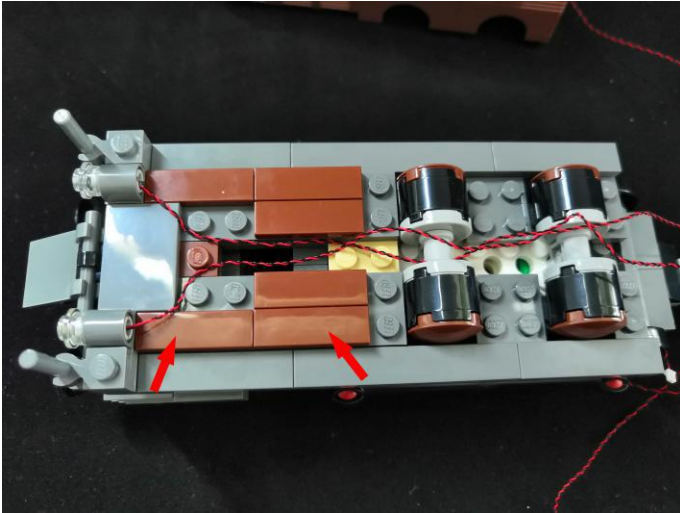
Take a warm white 30cm dot light, repeat the steps above to install the light at the other side.



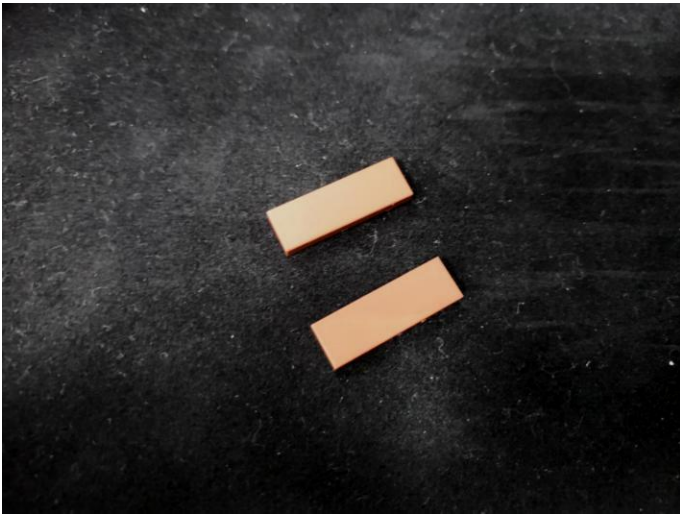
Connect 2 round 1x1 plates to the following places to secure the lights.



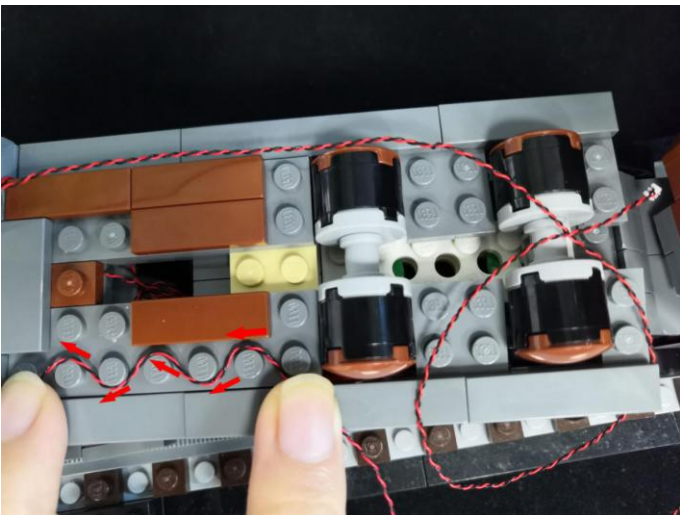
Turn to the roof.



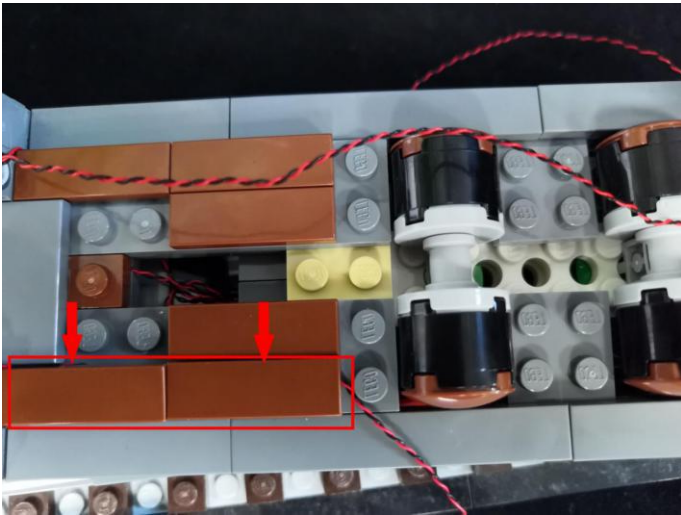
Disconnect the following 2 plates from the roof.



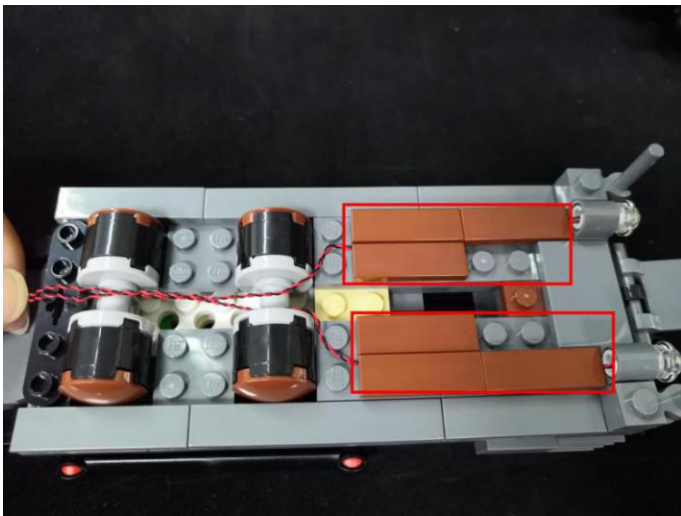
Follow the arrows to place the cable in between studs as per below.



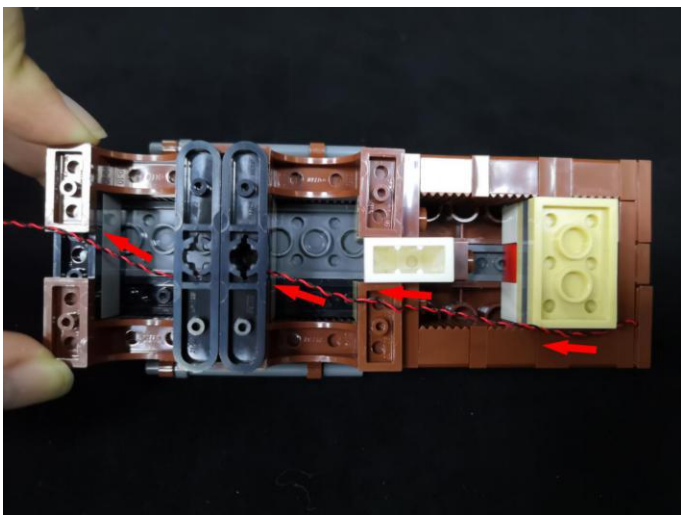
Reconnect the 2 plates.



Hide the other cable underneath the plates as per below.

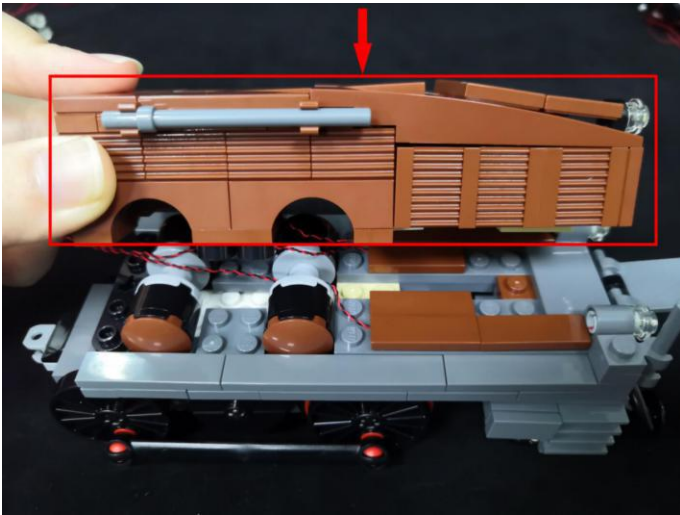


Place the cable at the roof as per below.

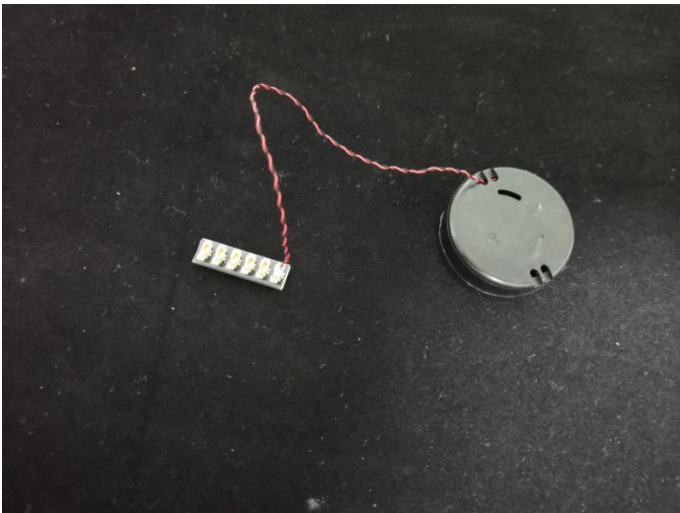


Reconnect the roof.





Take the Round Coin Cell Battery Pack, the expansion board, assemble them as per below, connect the cables of the lights to the expansion board, turn the power on to verify the lights.



Take 2 white 30cm dot lights, a 30cm warm white dot light, 3 trans round 1x1 plates. Repeat the steps above to install the lights at the other side of the head.



This completes installation of the lights for the number ③ part.



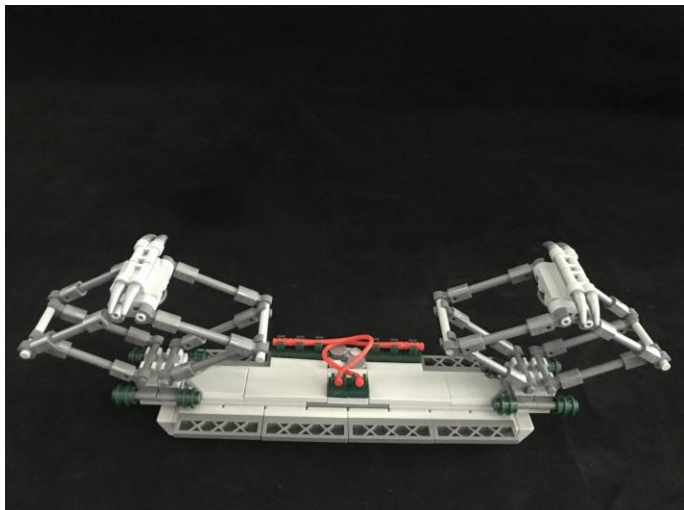
Take the number ② part.



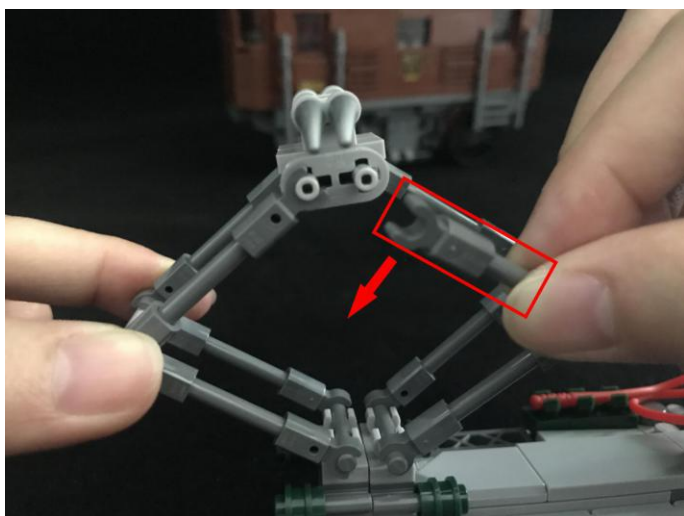
Remove the roof.



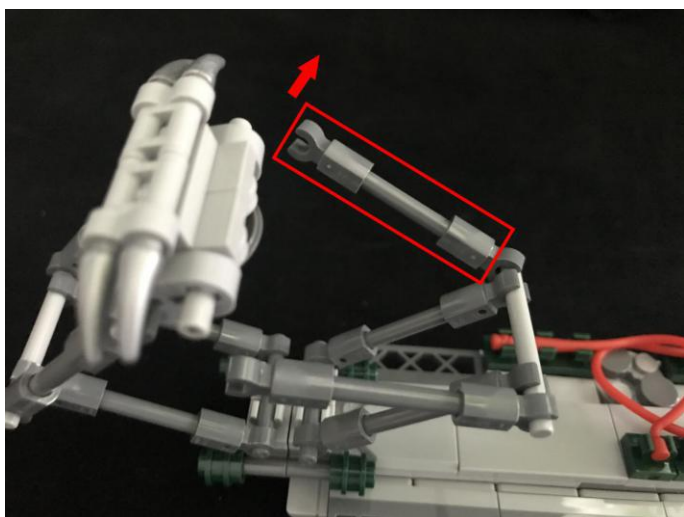
Take the roof as per below.



Pull the gray support out from the left.

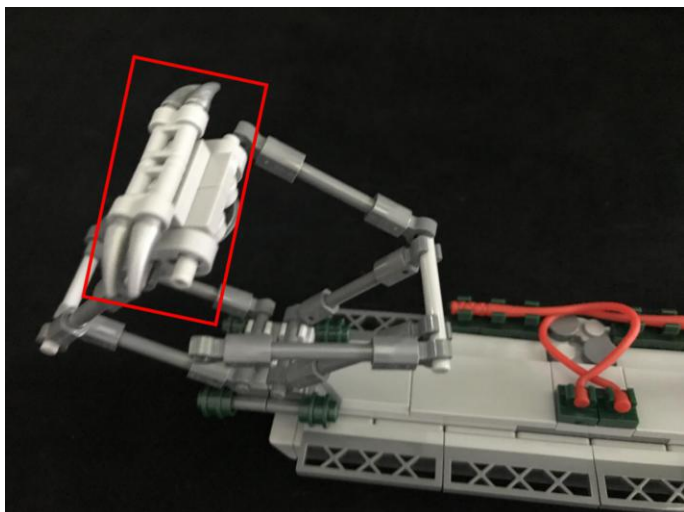


Continue to pull the gray support out from the right.

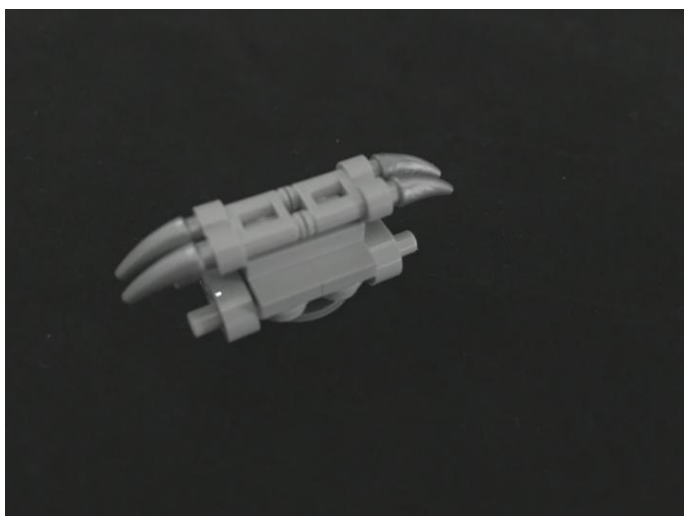


Pull the following piece up.





Disconnect this piece as per below.



Disassemble the piece as per below.



Take 2 trans round 1x2 plates, two 30cm head lights, and 2 adhesive squares.

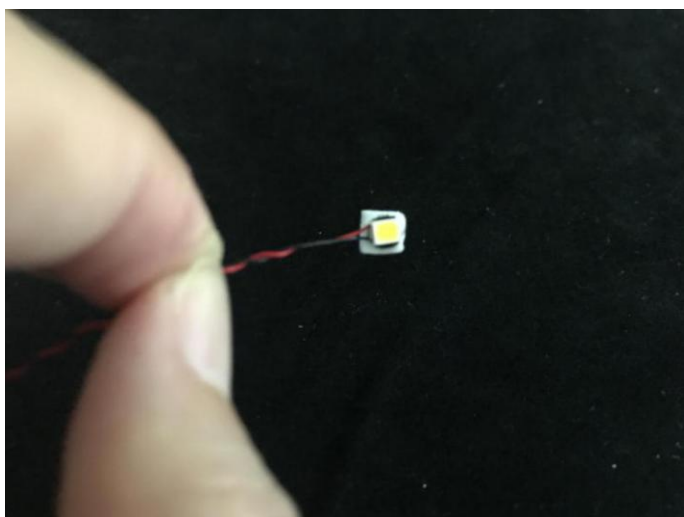




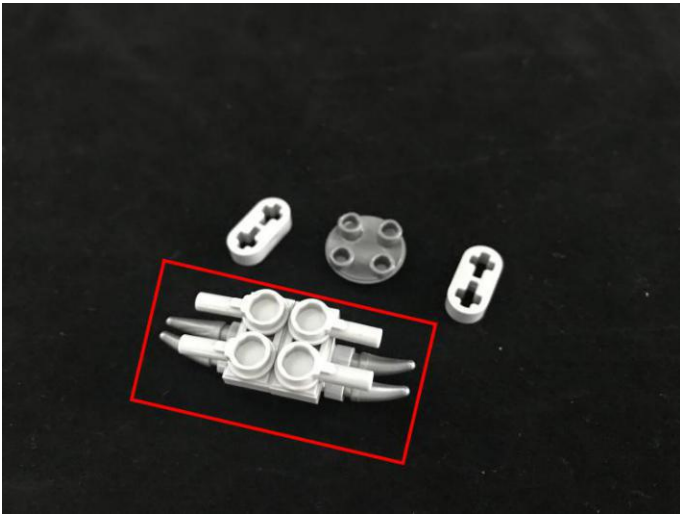
Take the Round Coin Cell Battery Pack and the expansion board, repeat the previous steps to verify the lights.



(After the test, disconnect the light, leave the battery pack aside.)  
With lighting part facing up, stick the light on the adhesive square.



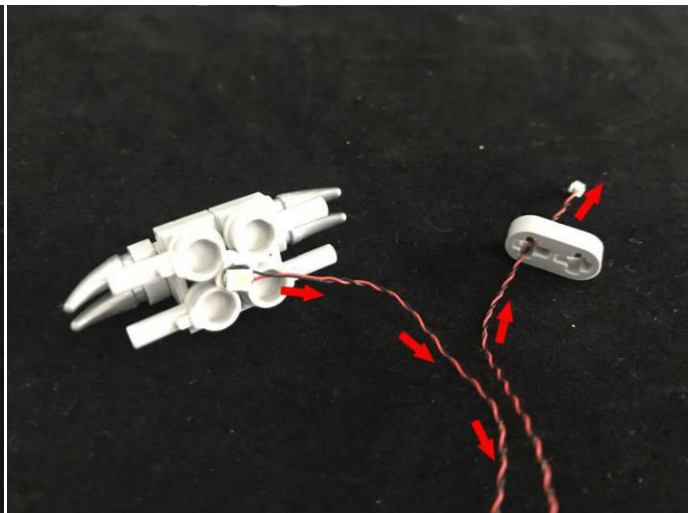
Take the following piece marked in red.



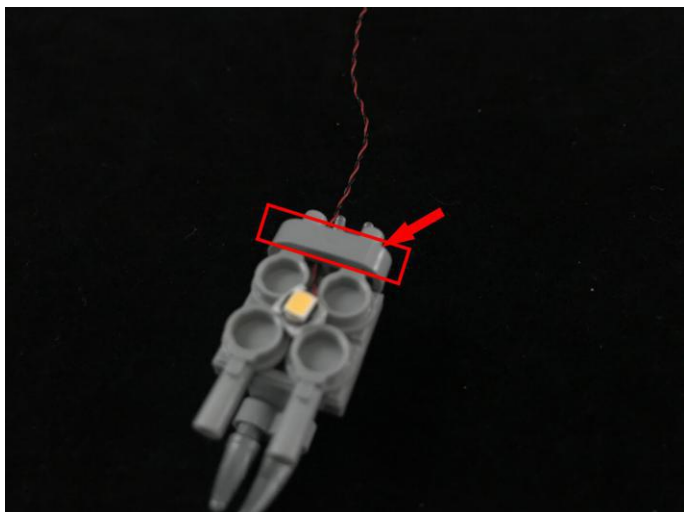
Stick the light to the following place.



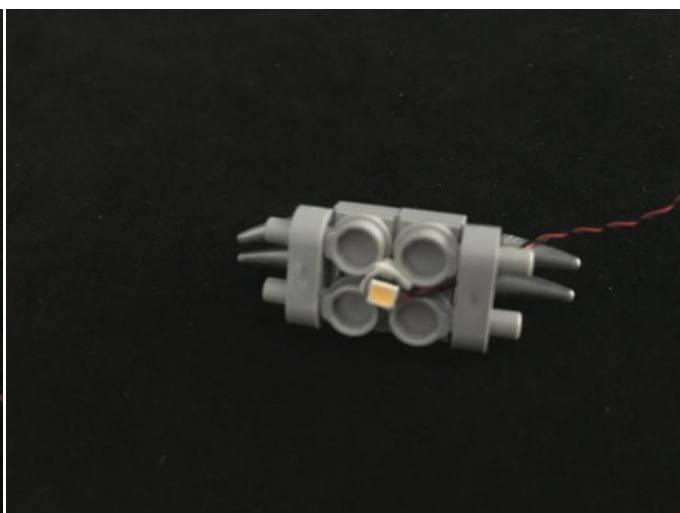
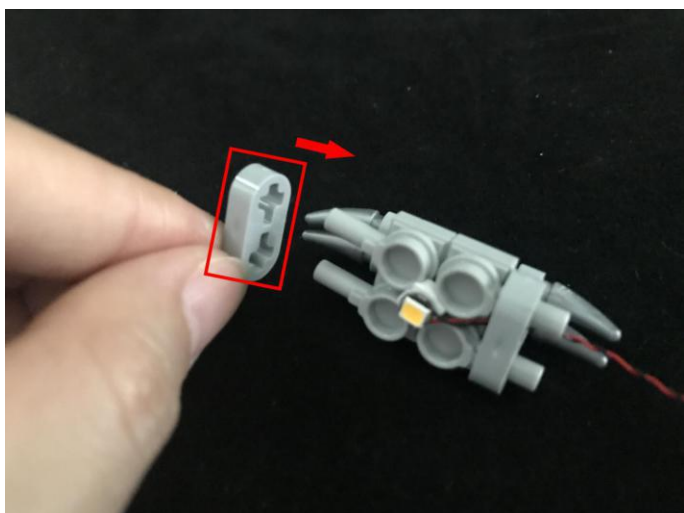
Take the following piece marked in red, thread the cable through it as per below.



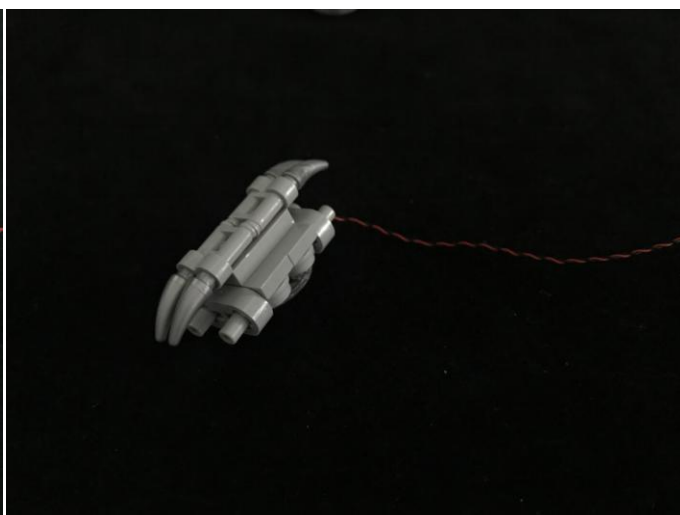
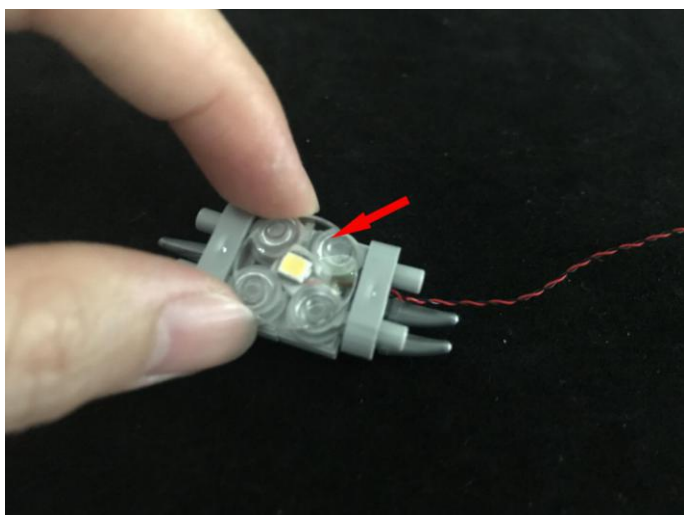
Reconnect the following gray piece.



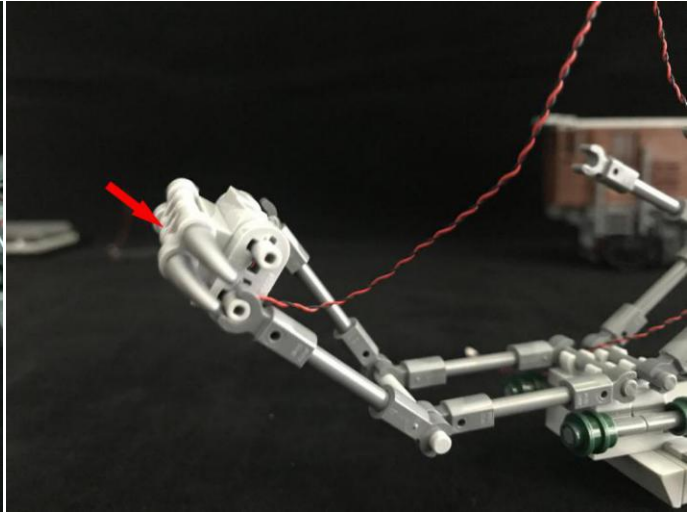
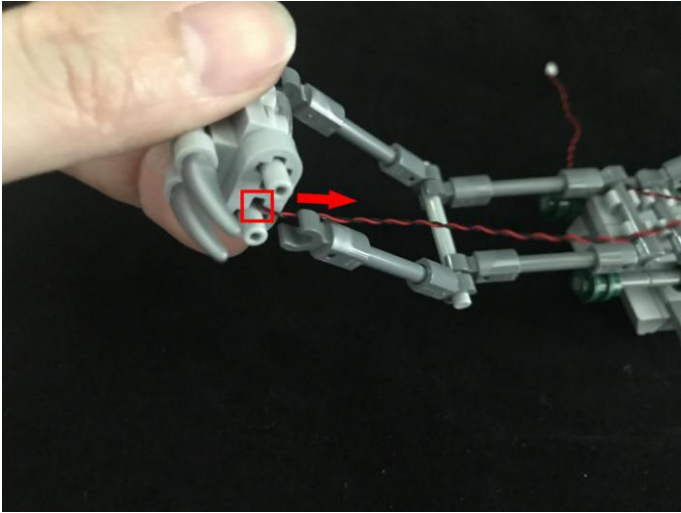
Continue to reconnect the other gray piece.



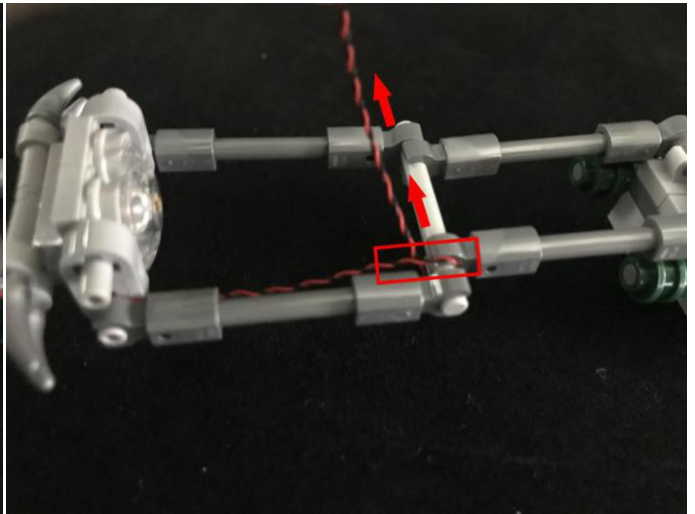
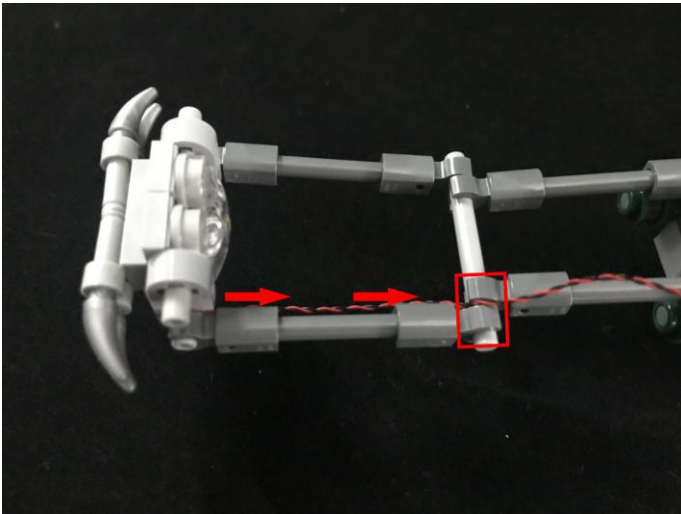
Take a 2x2 trans round plate, connect it over the light.



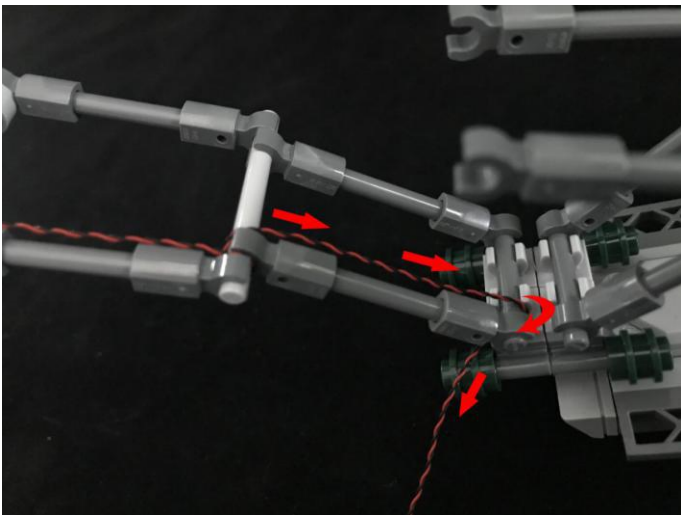
Pull the cable out, reconnect the following piece.



Wind the cable around the following white pipe.

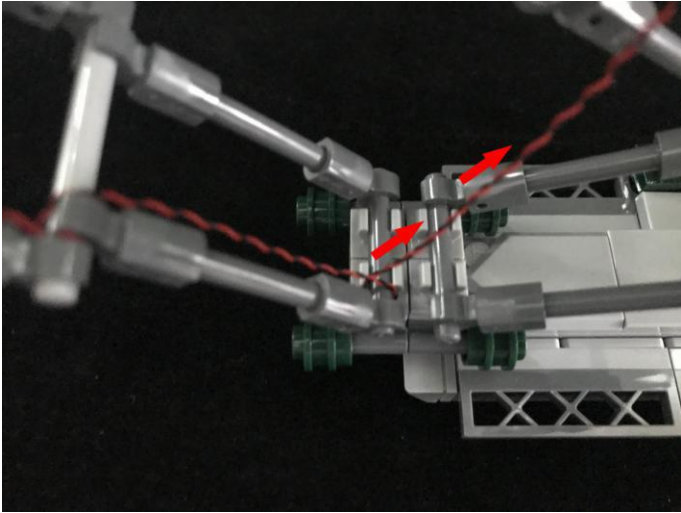


Follow the arrows to thread the cable down through the following gray piece.

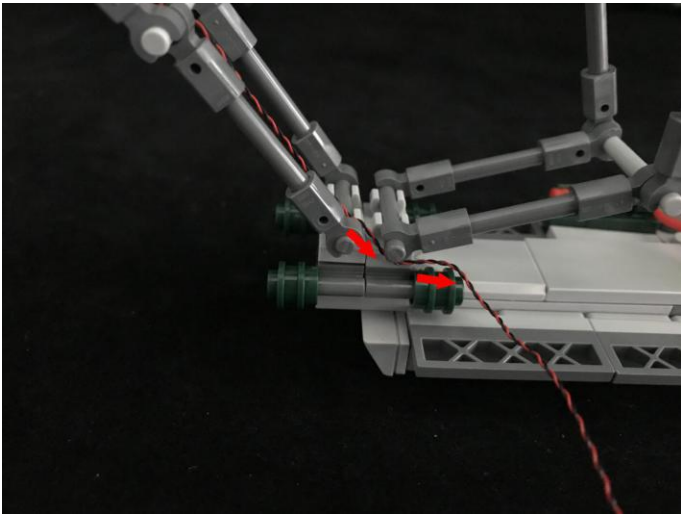


Pull the cable up.

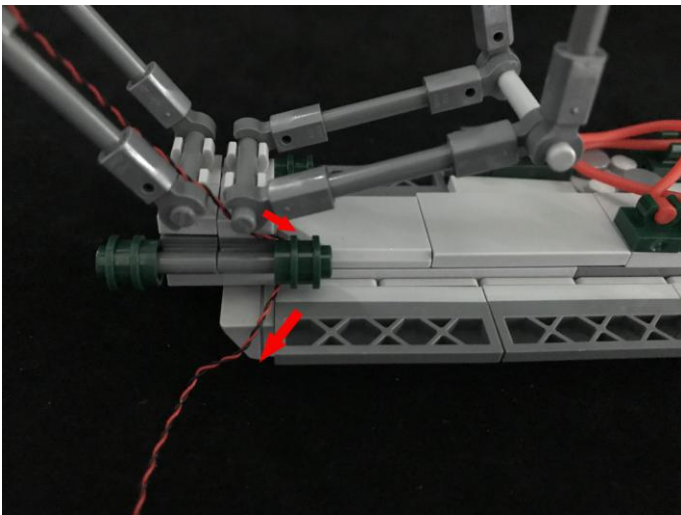




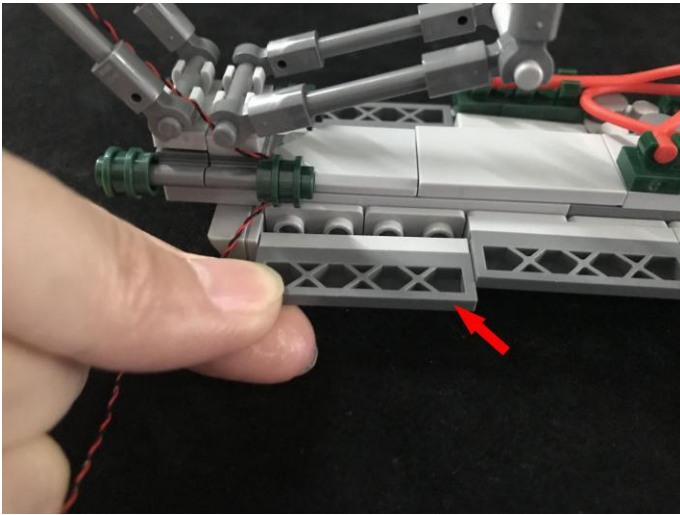
Place the cable as per below.



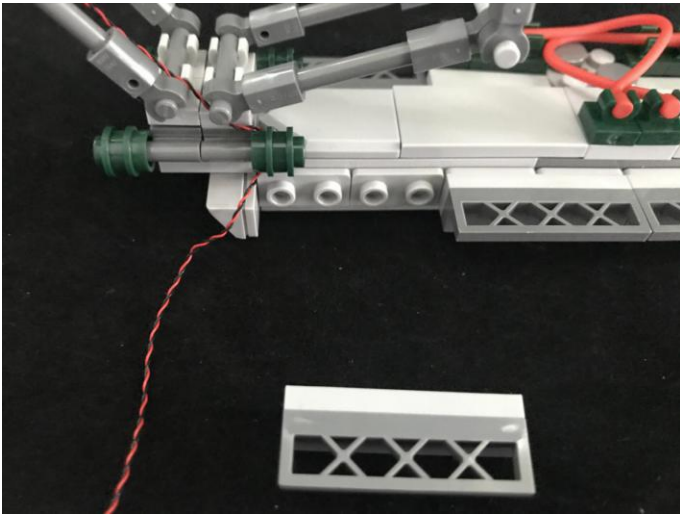
Continue to place the cable as per below, and tighten up the cable.



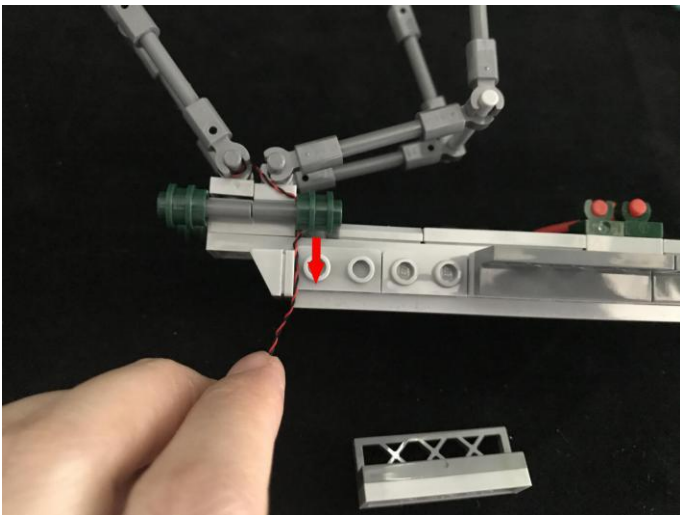
Disconnect the following piece.



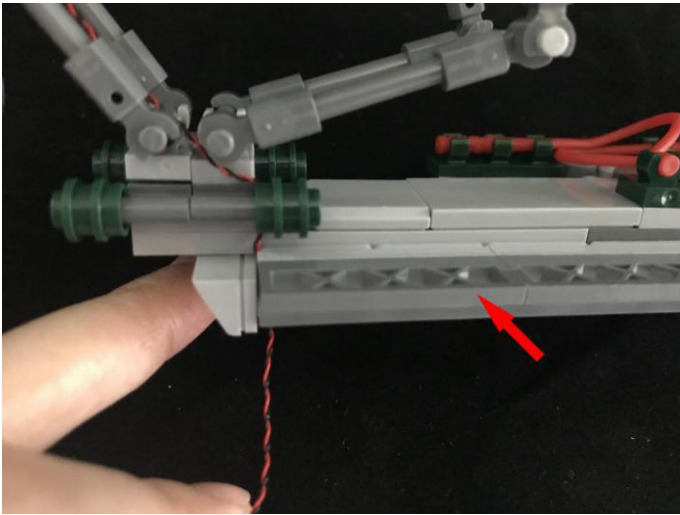
Take the piece as per below.



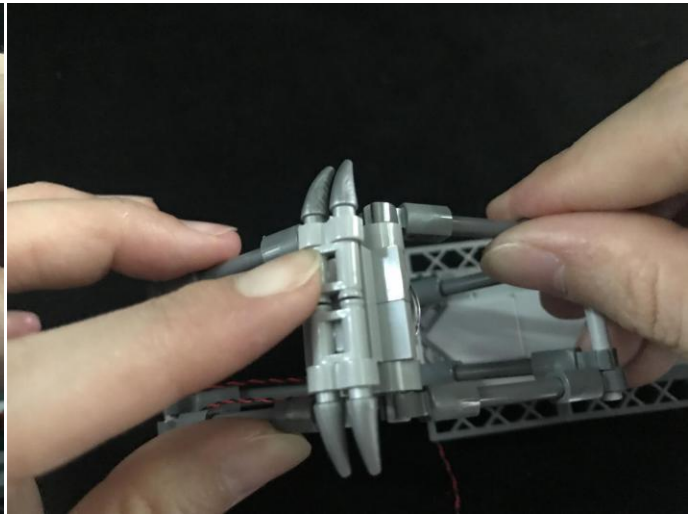
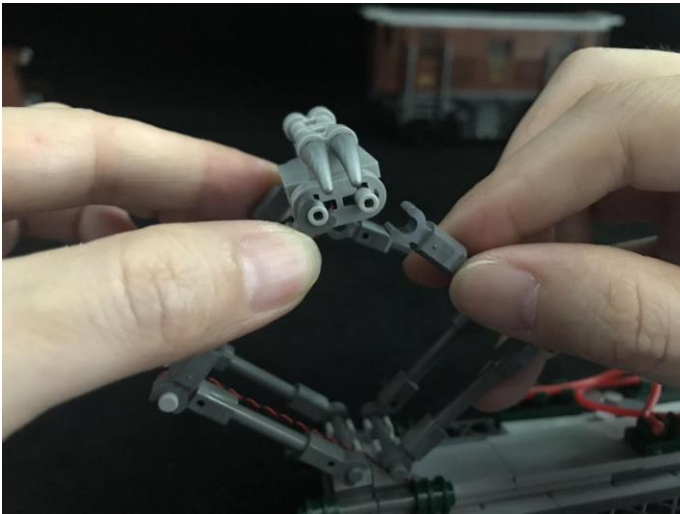
Pull the cable down as per below.



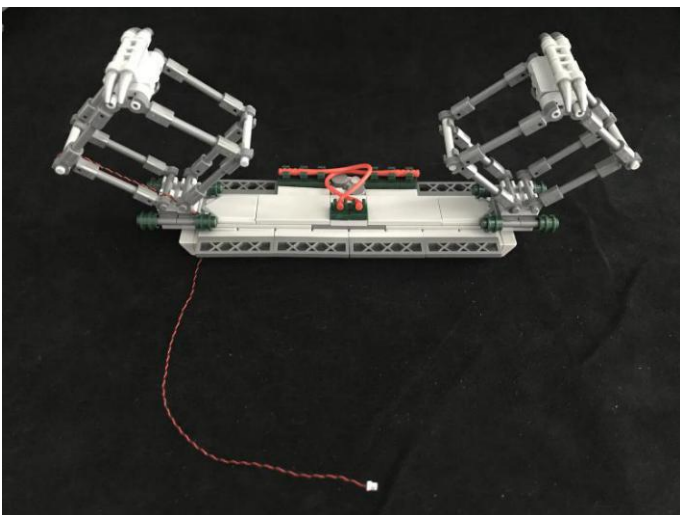
Reconnect the gray piece.



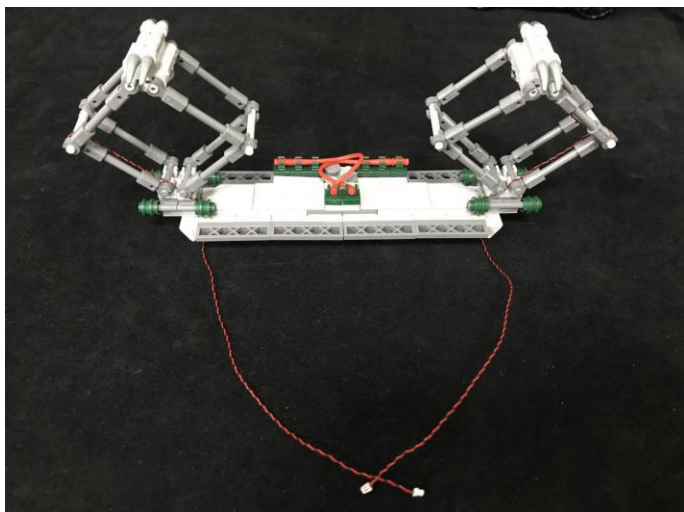
Turn to the roof, reconnect the 2 gray pieces.



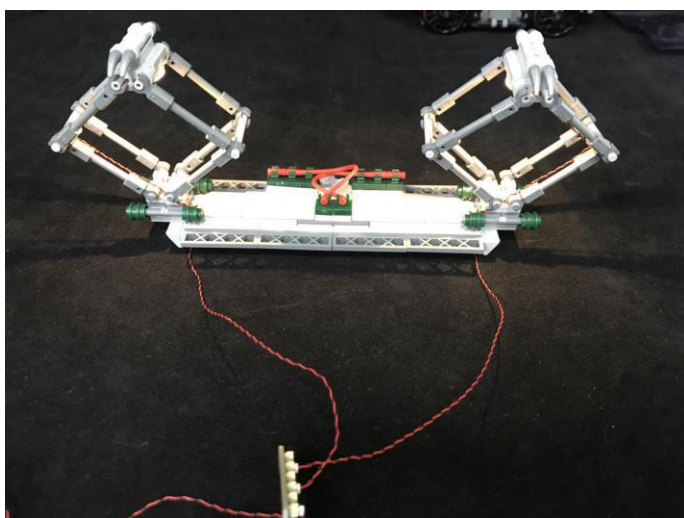
This completes installation of the light for the left side.



Take a trans 1x2 round plate, a 30cm head light, an adhesive square, repeat the previous steps to install light for the right side.



Take the Round Coin Cell Battery Pack, the expansion board, connect the cables of the lights to the expansion board, turn the power on to verify the lights.

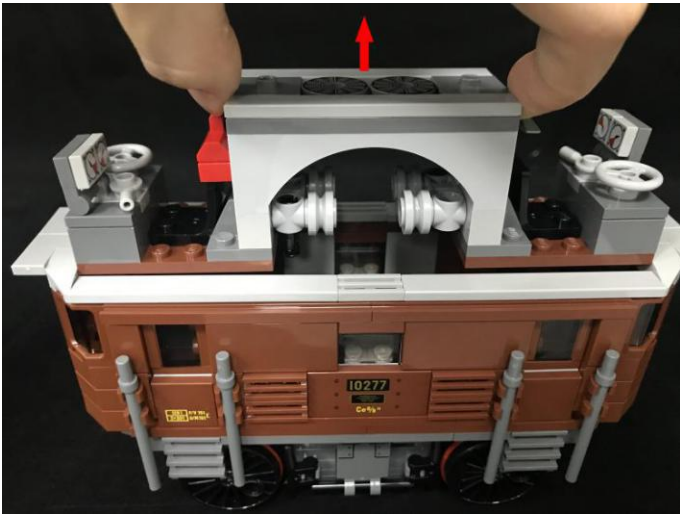


Take the carriage from the middle of the train.

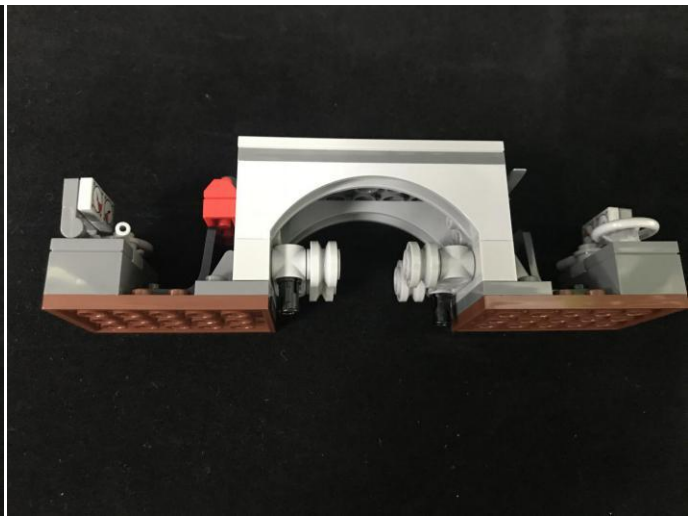
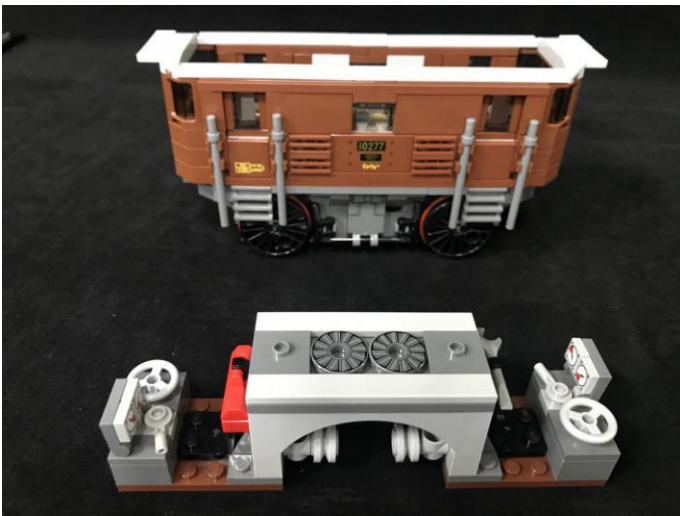


Pull the following part up.

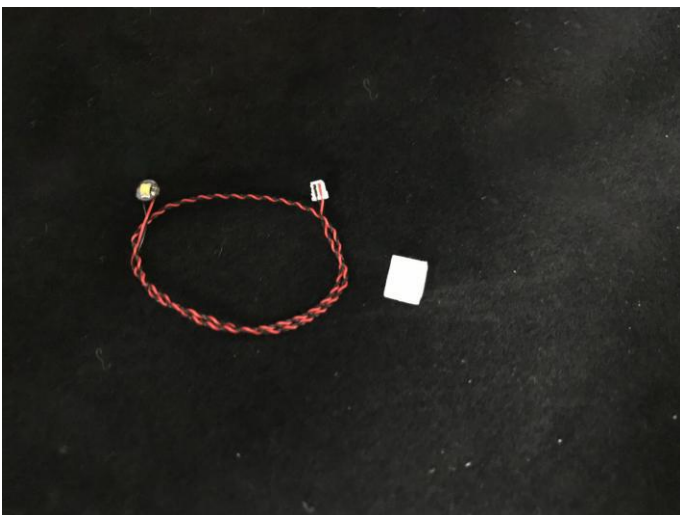




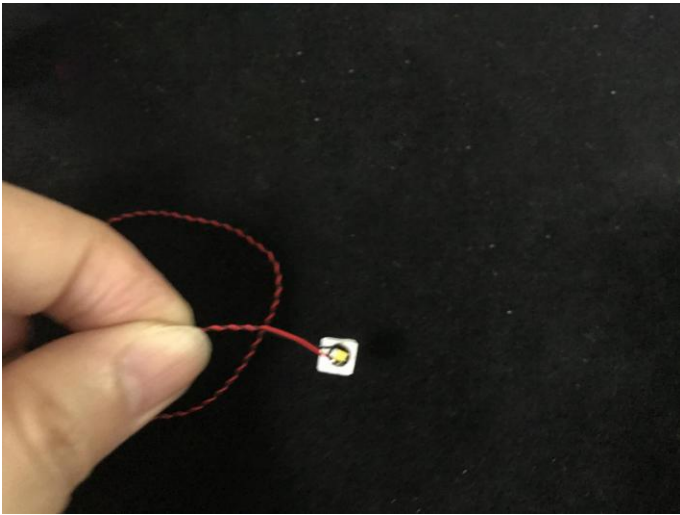
Disconnect the piece as per below.



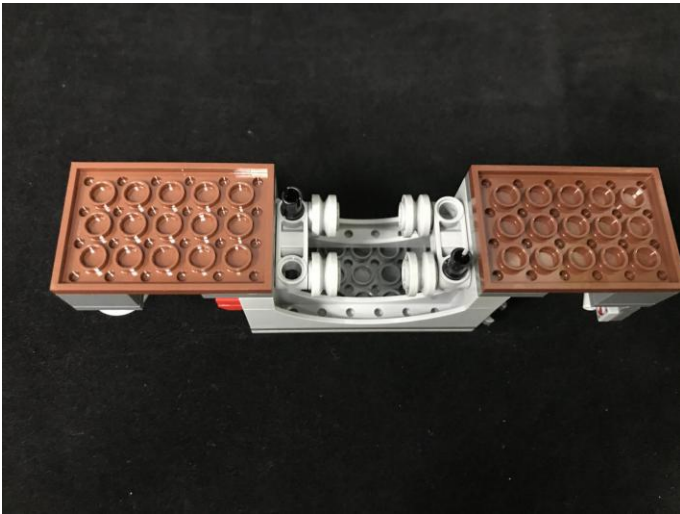
Take a warm white 15cm dot light, an adhesive square.



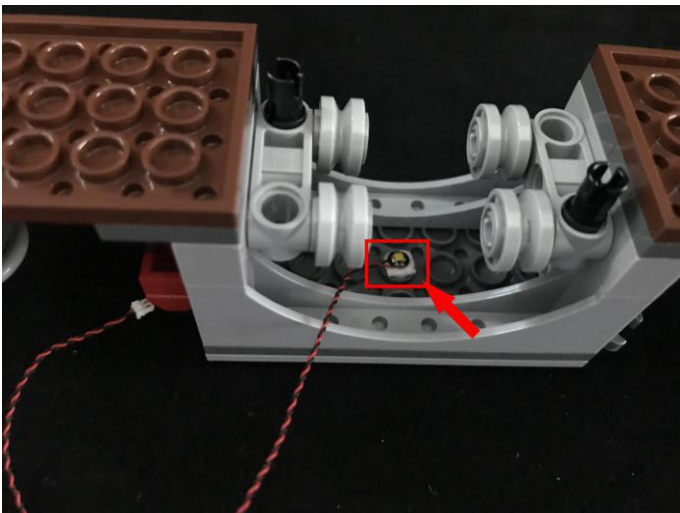
With lighting part facing up, stick the light to the adhesive square.



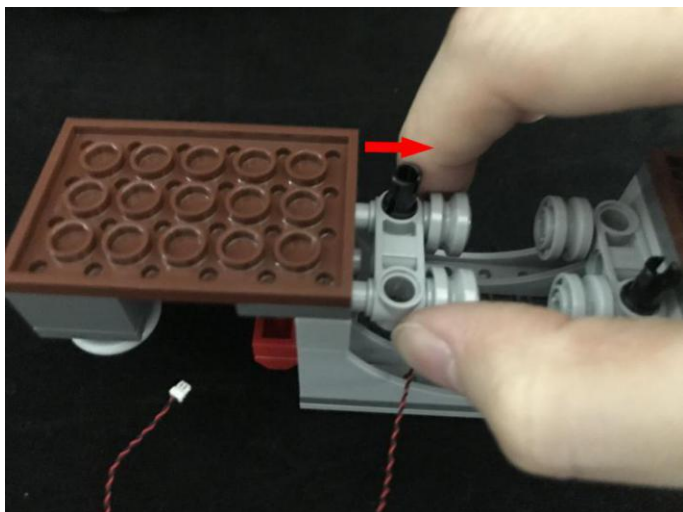
Turn the following part over.



Stick the light to the following place.



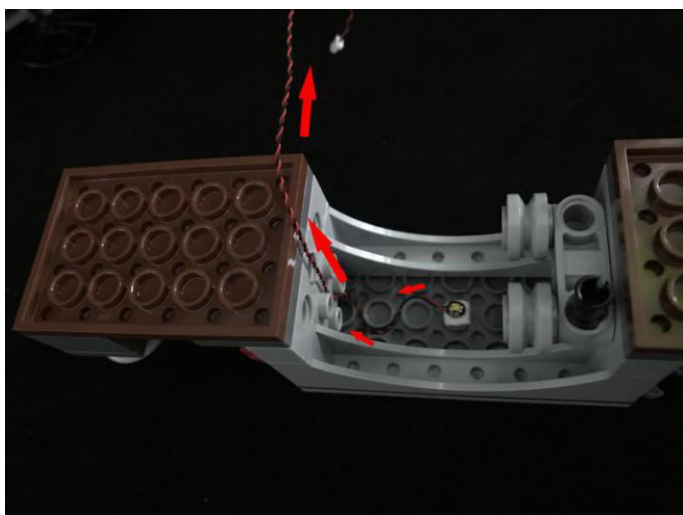
Pull the following piece out.



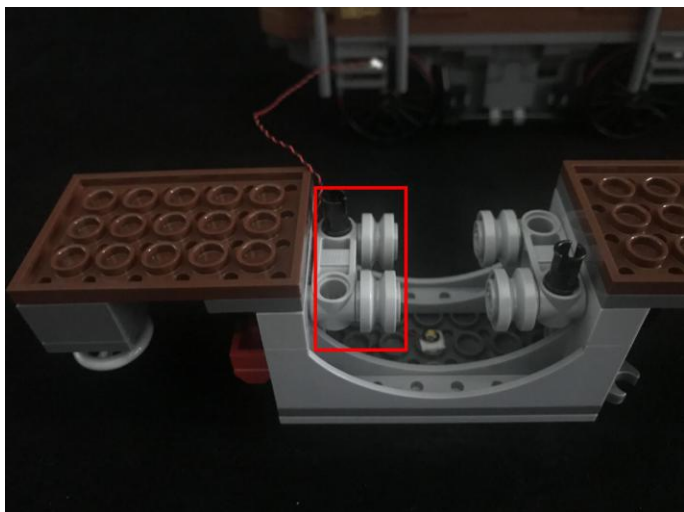
Remove the piece as per below.



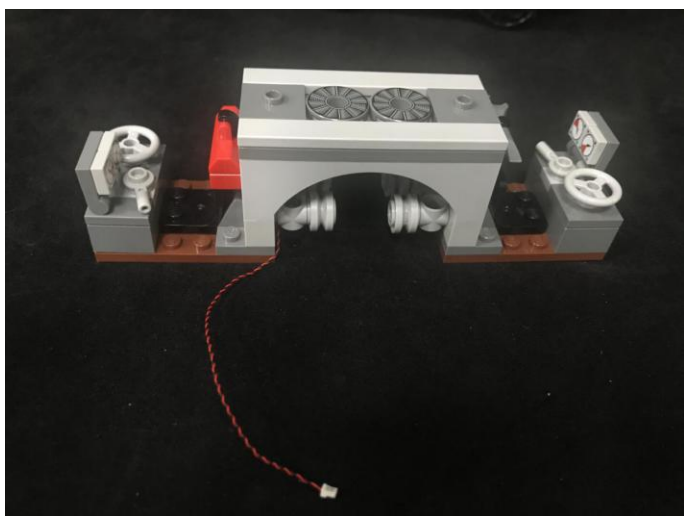
Place the cable as per below in between studs.



Reconnect the following piece.



Turn the part back, lift the following piece to thread the cable through.

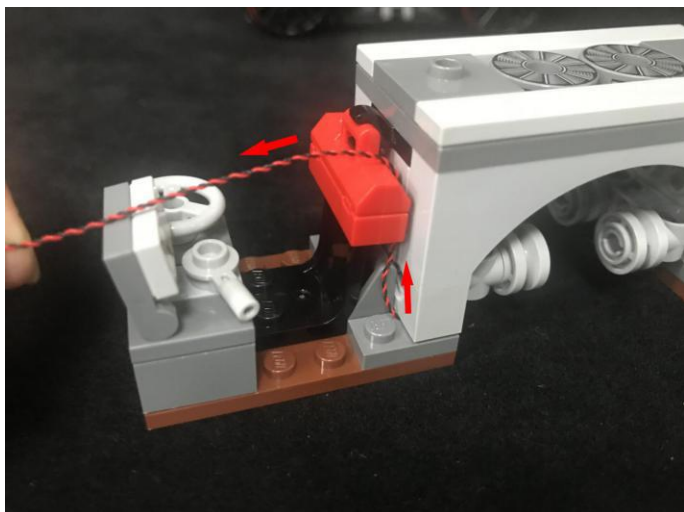


Reconnect the piece (in case of damaging the cable, do not press the piece too hard).

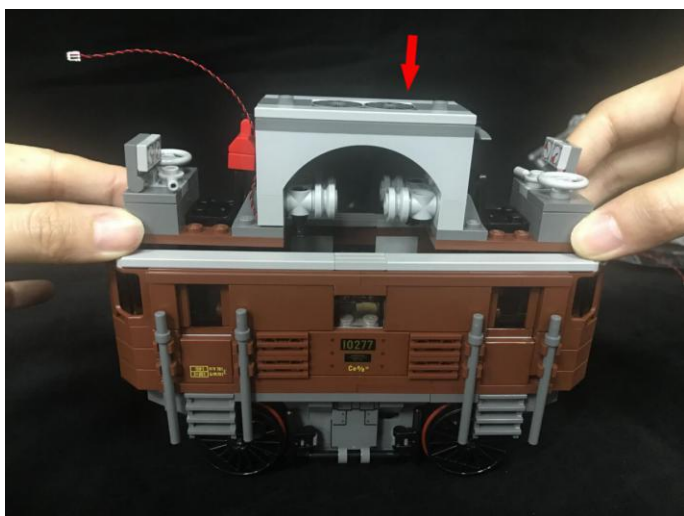


Place the cable as per below.

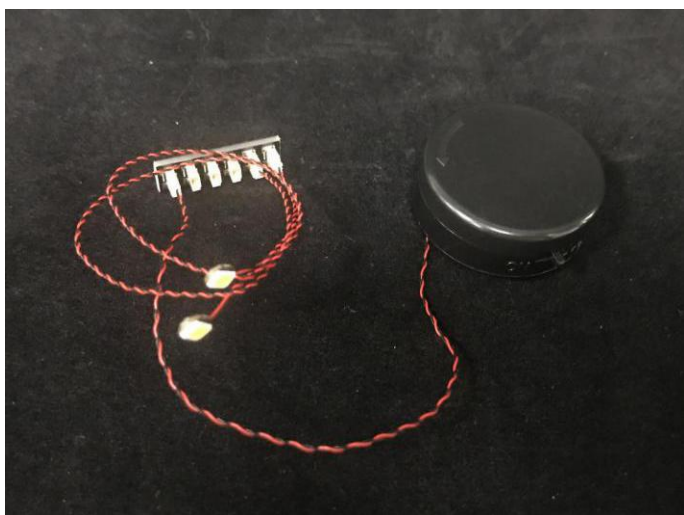




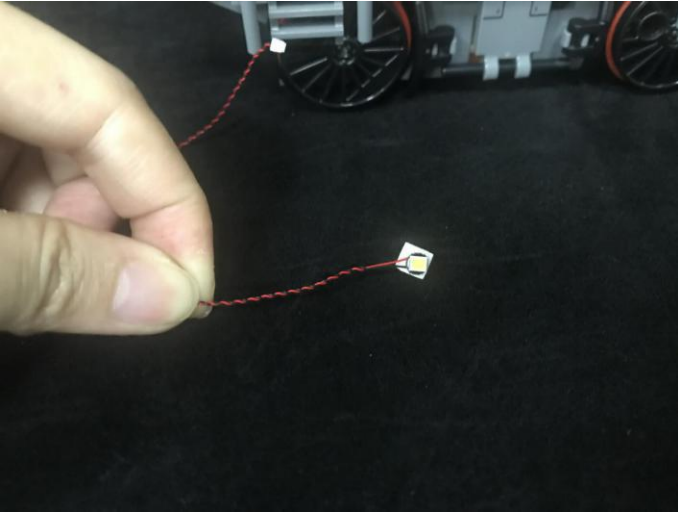
Reconnect this part.



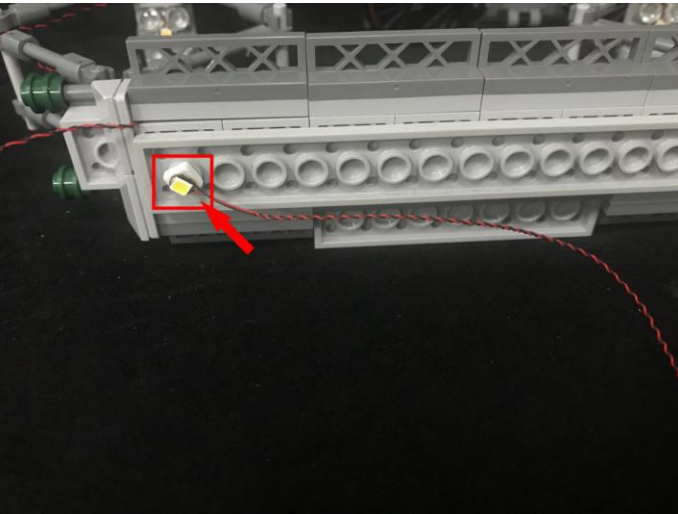
Take two 15cm head lights, 2 adhesive squares.



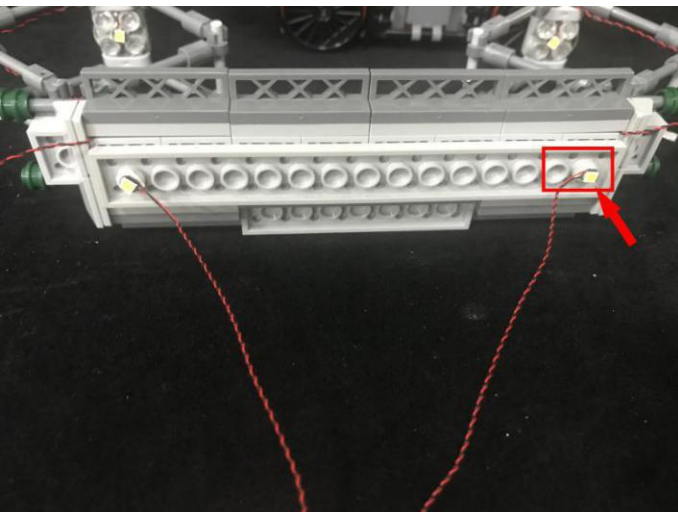
With lighting part facing up, stick the light to the adhesive square.



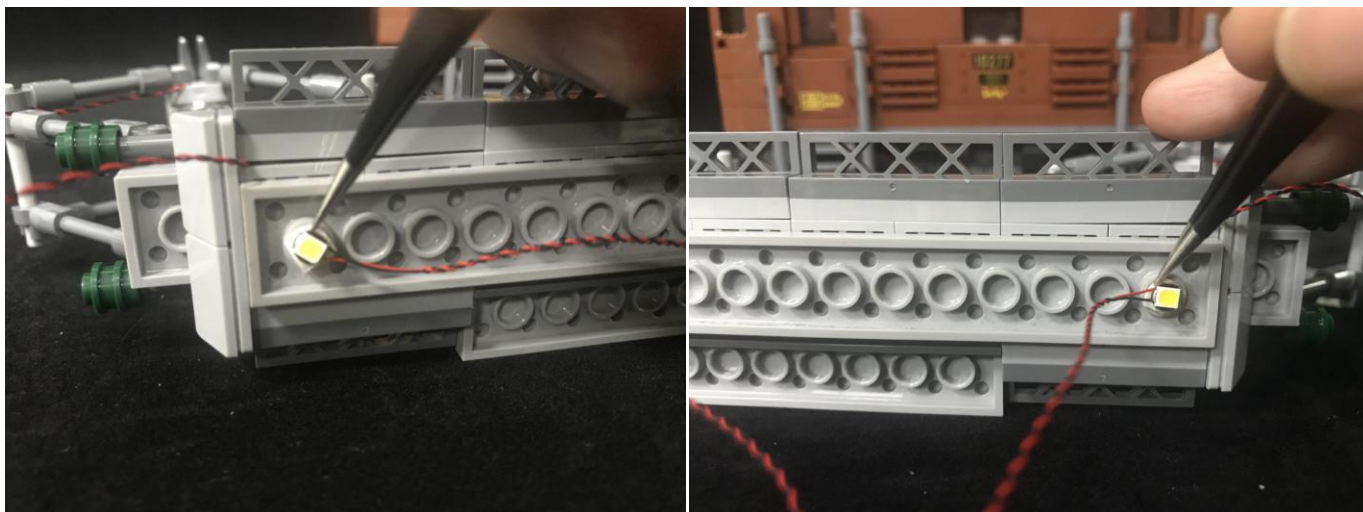
Take the roof stick the light to the following place.



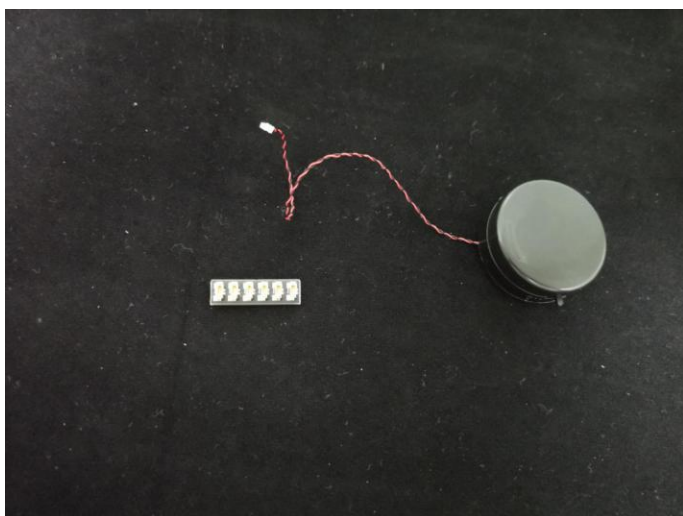
Take a 15cm head light, an adhesive square, repeat the steps above to install light to the other side of the roof.



You can take a tweezer to help to connect the lights (note: do not scratch the pieces).



Disconnect the 6-port expansion board as per below.



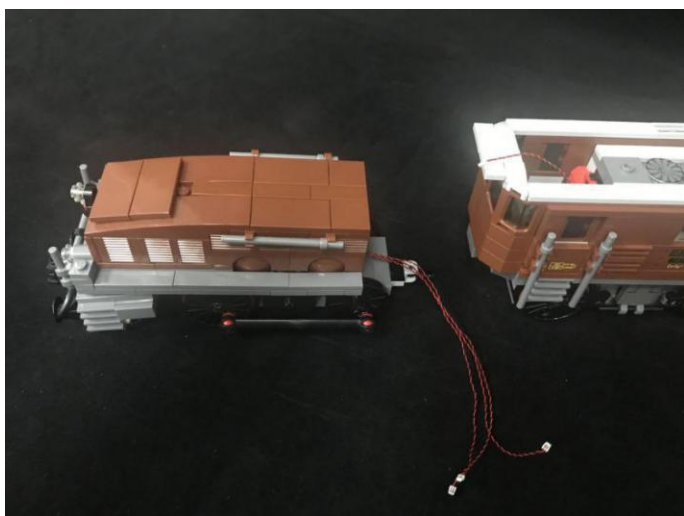
Take a 15cm connecting cable, a 6-port expansion board, an 8-port expansion board.



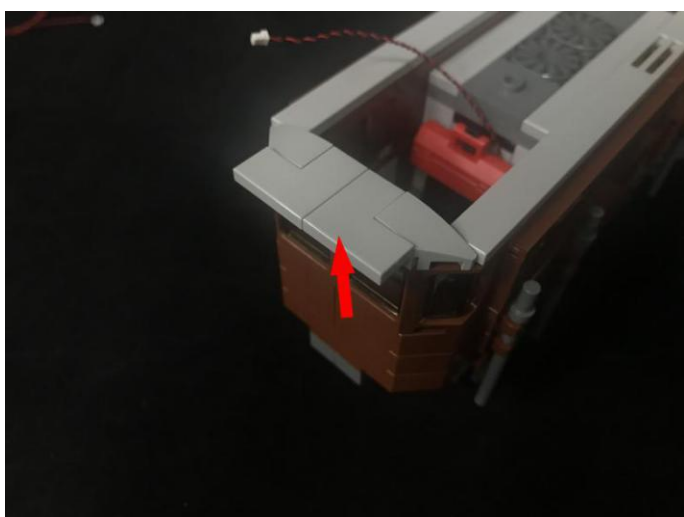
Assemble the 2 expansion boards together with the connecting cable.



Take the number ③ part.



Follow the arrow to remove the piece.

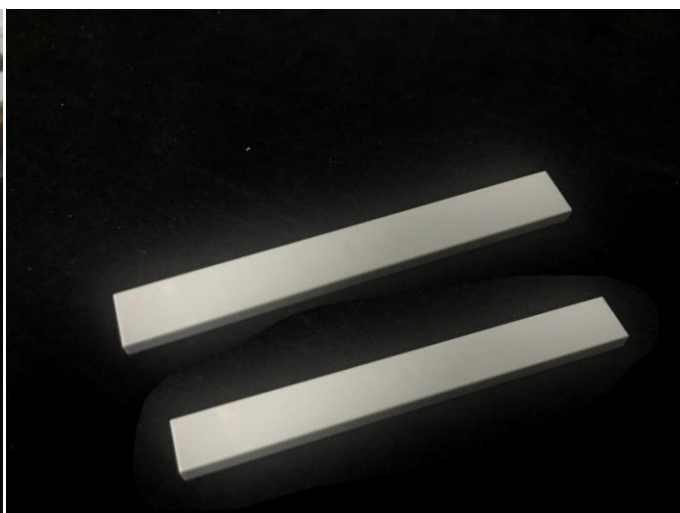
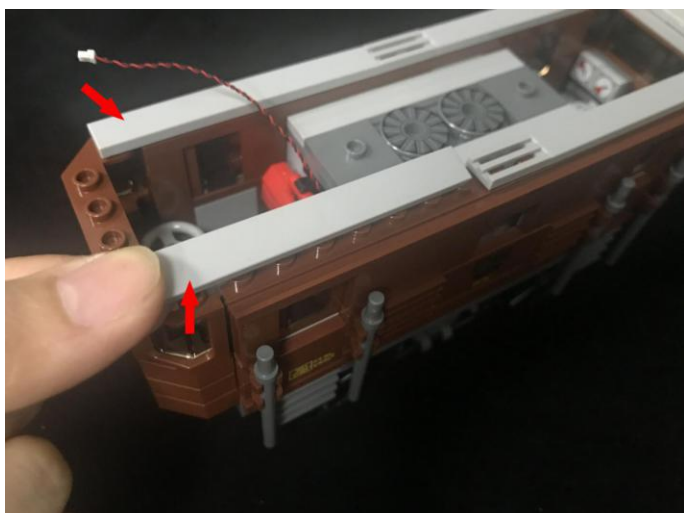


Continue to remove the following piece.

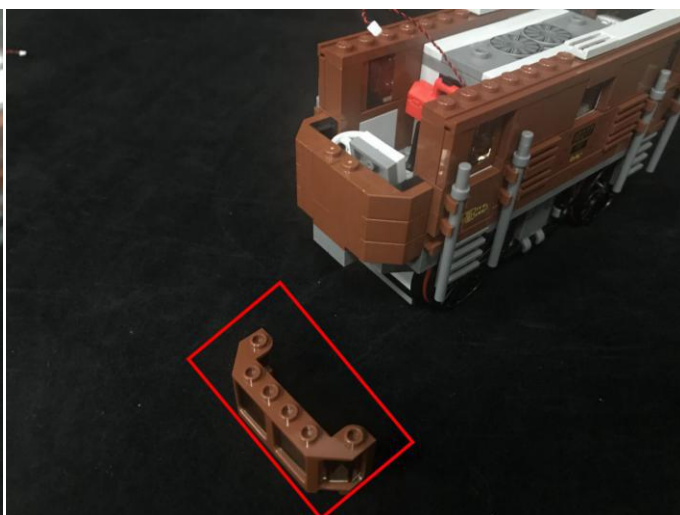
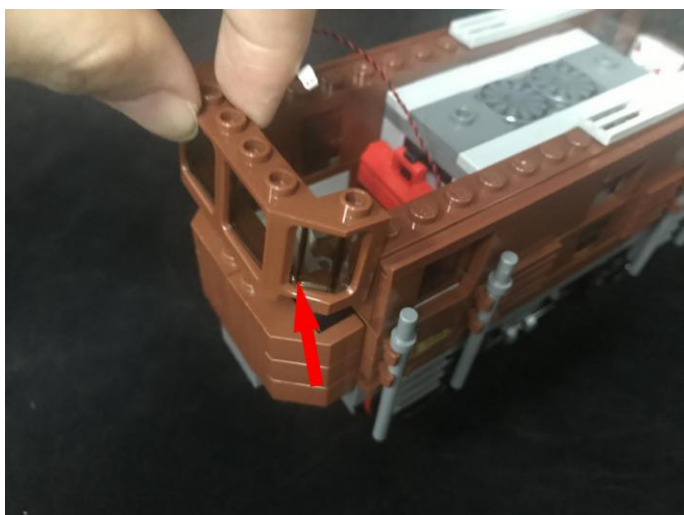




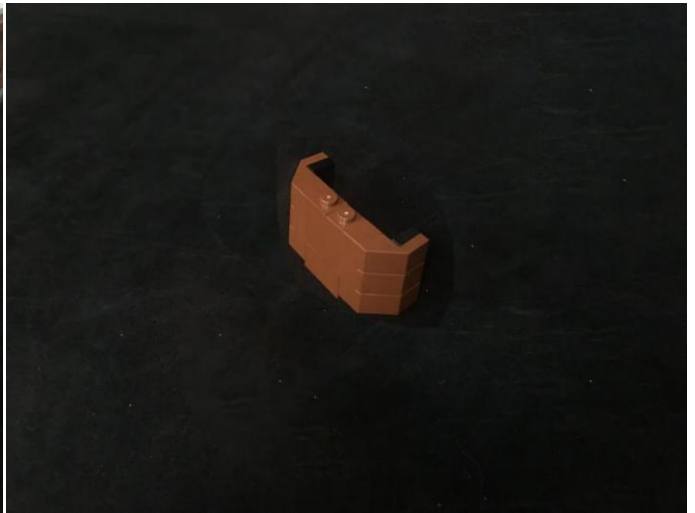
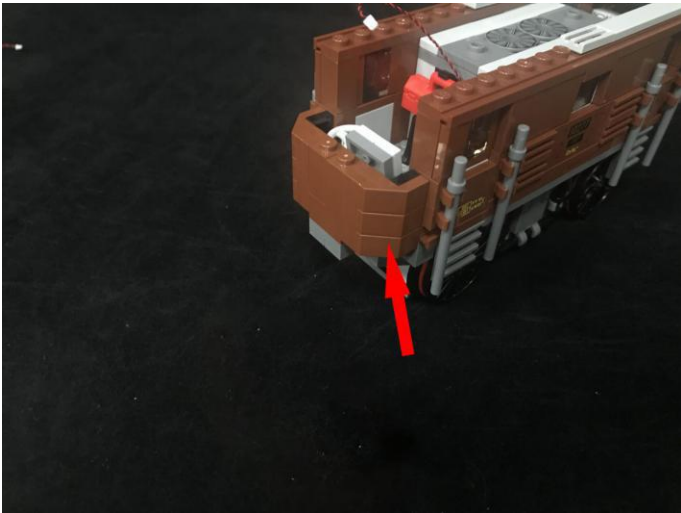
Disconnect the gray plates from both sides as per below.



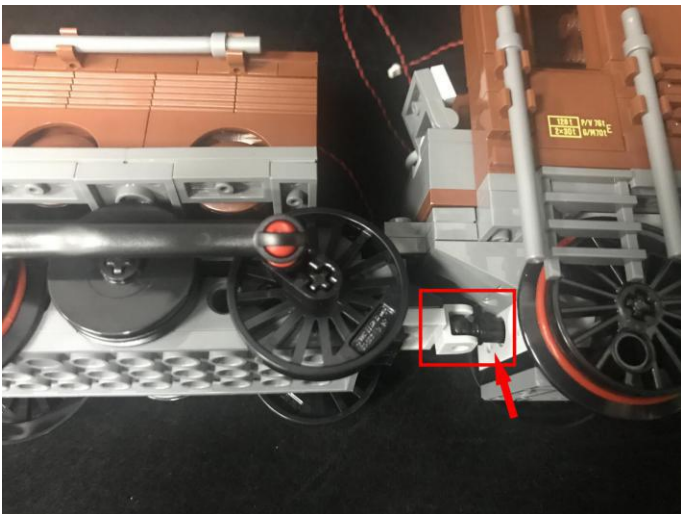
Remove the window piece.



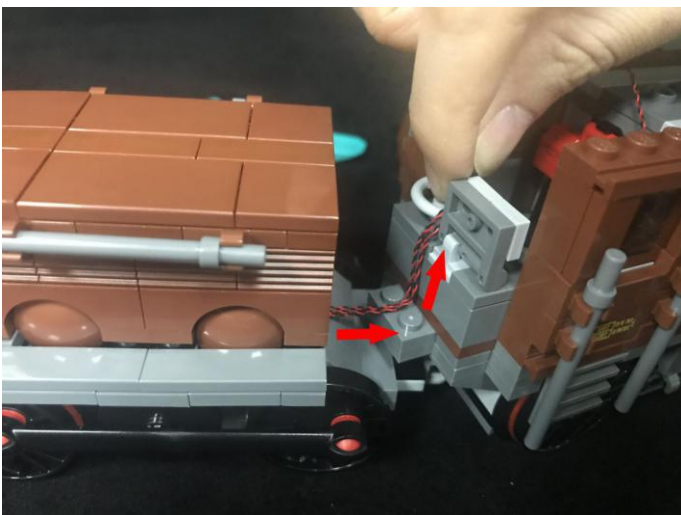
Remove the following piece.



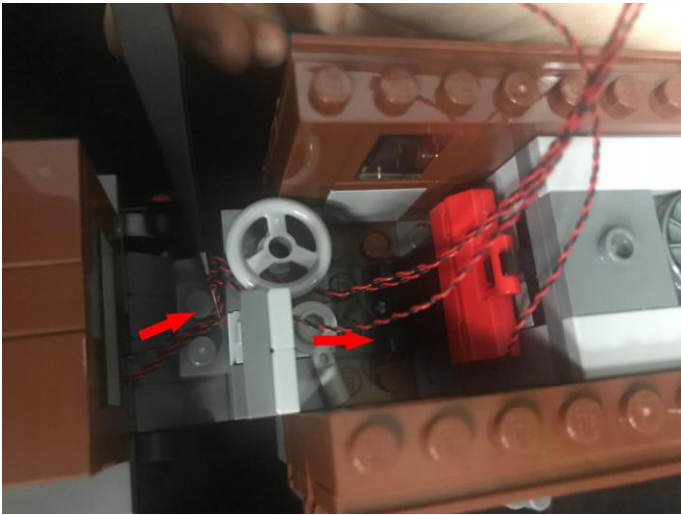
Reconnect the number ③ part.



Follow the red arrows, place the 3 cables as per below.



Thread the cable through the steering wheel into the carriage (you can take the tweezers to help).



Reconnect the following piece.

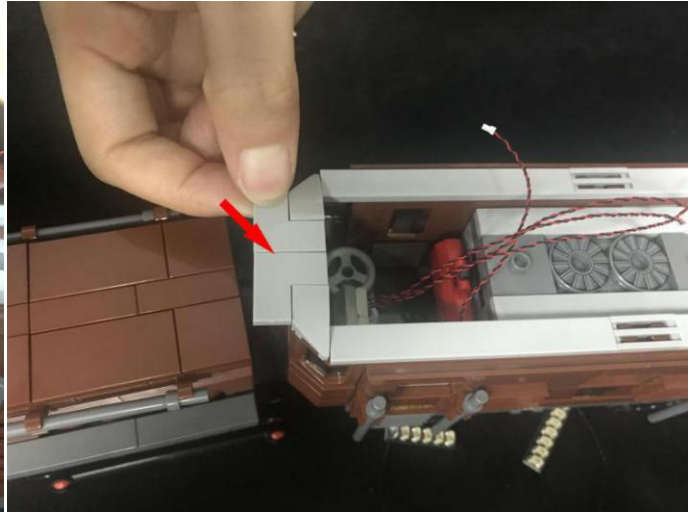
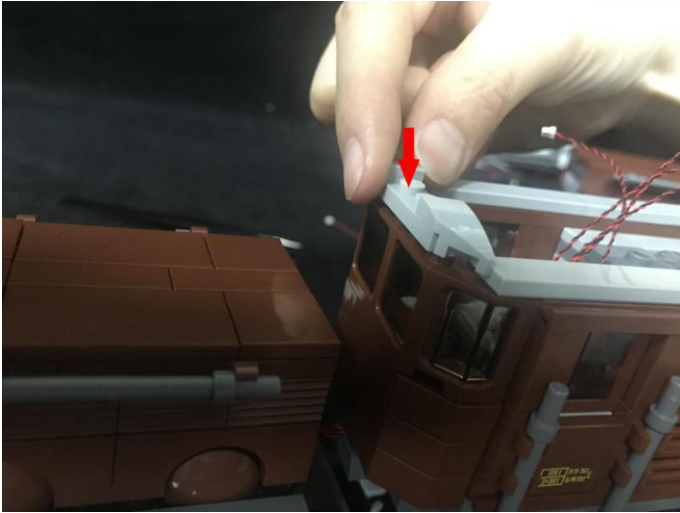


Reconnect the window.



Continue to reconnect the following piece.

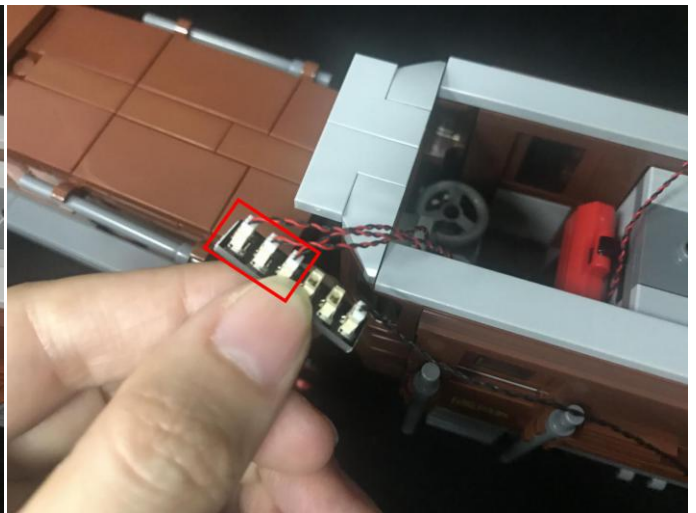




This completes installation of the head light and the carriage.

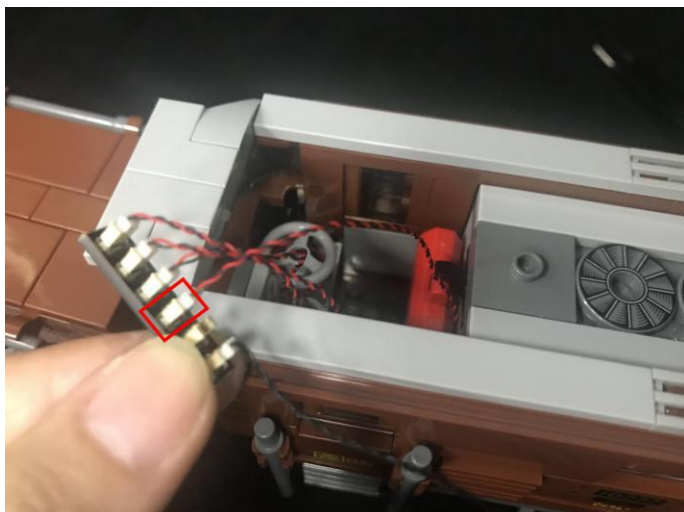


Take the 6-port expansion board, connect the 3 cables from the head to it.

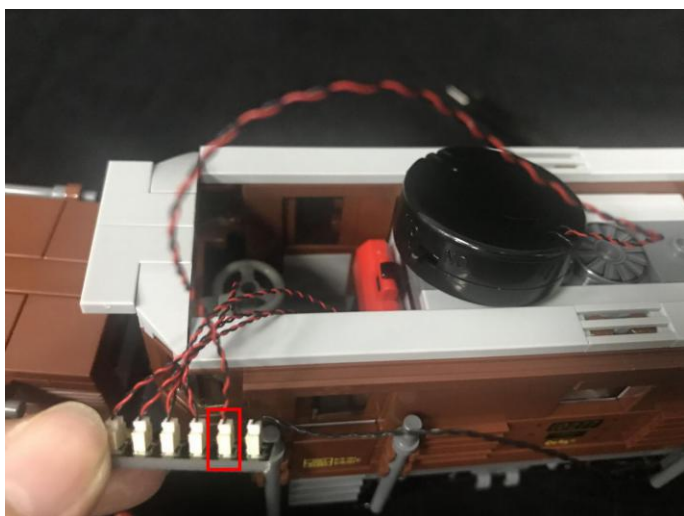


Connect the cable of the light inside the carriage to the expansion board.

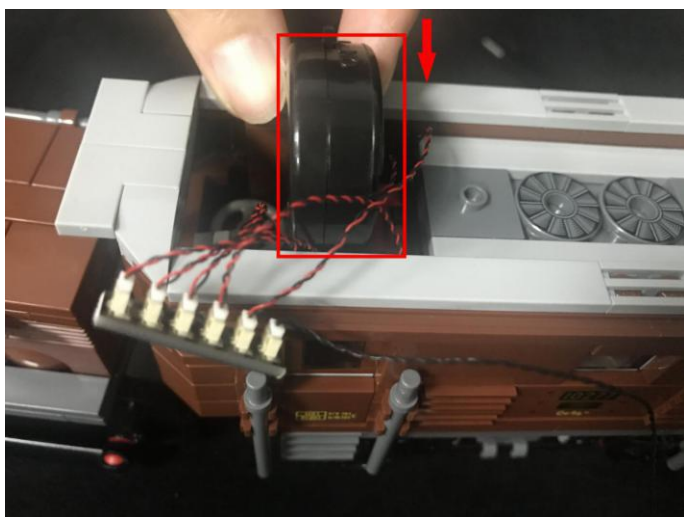




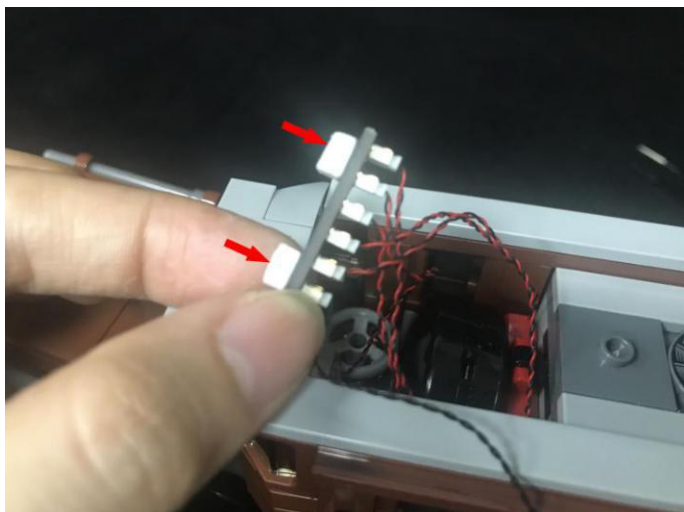
Take the Round Coin Cell Battery Pack, connect it to the expansion board as per below.



Place the Round Coin Cell Battery Pack at the following place.



Take 2 adhesive squares. Stick them to the expansion board.



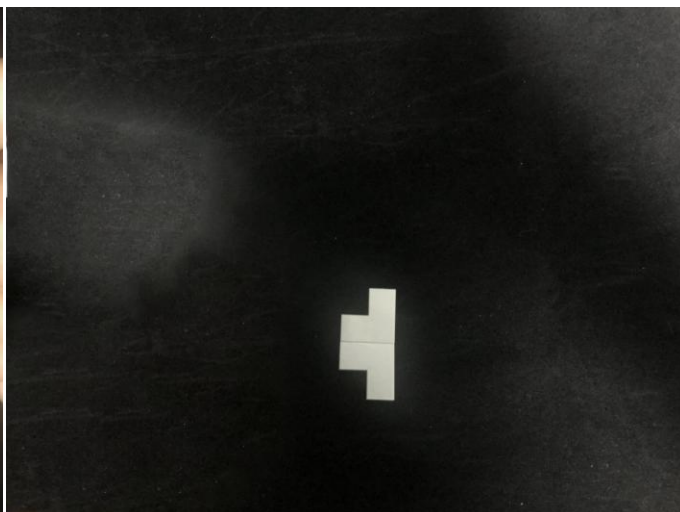
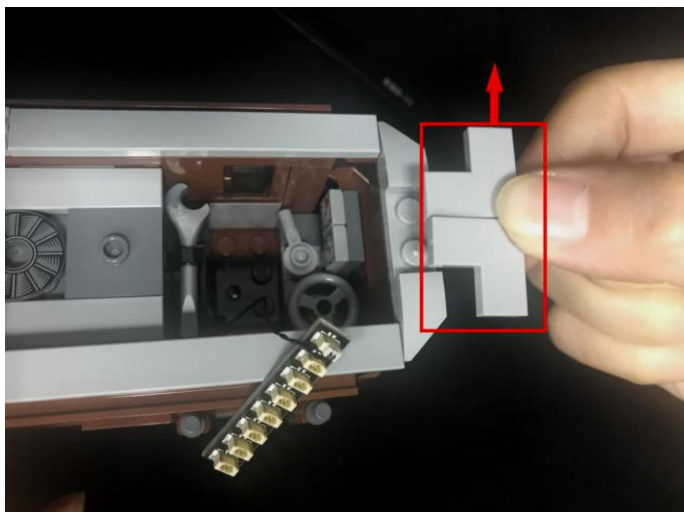
Stick the expansion board to the following place.



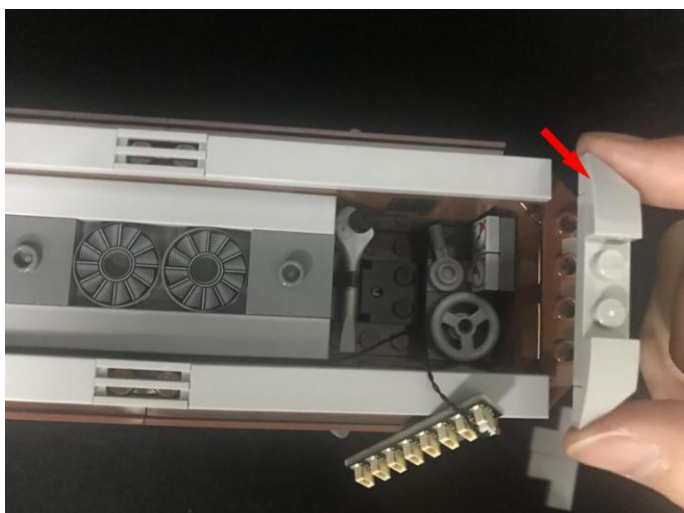
Place the cable inside the carriage as per below.



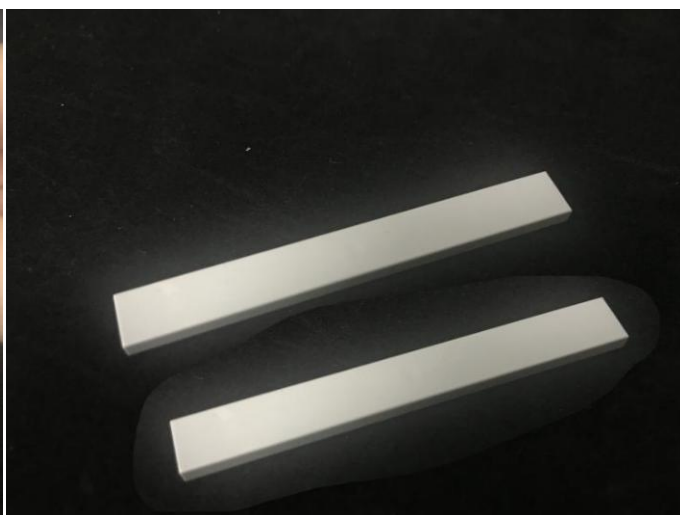
Remove the following gray piece.



Remove the following piece.

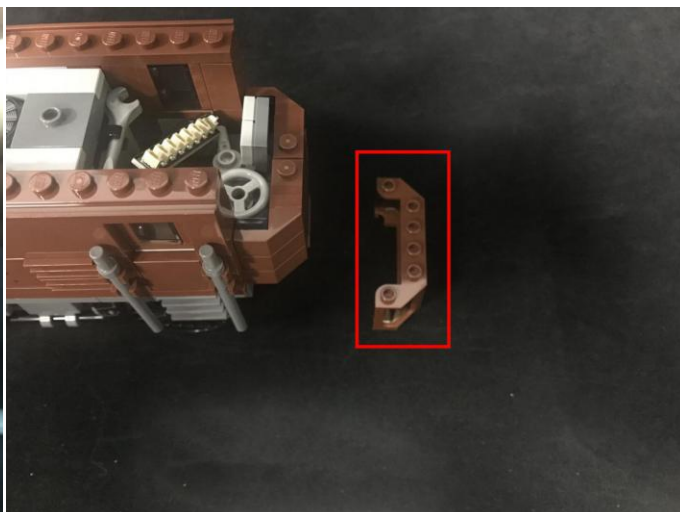
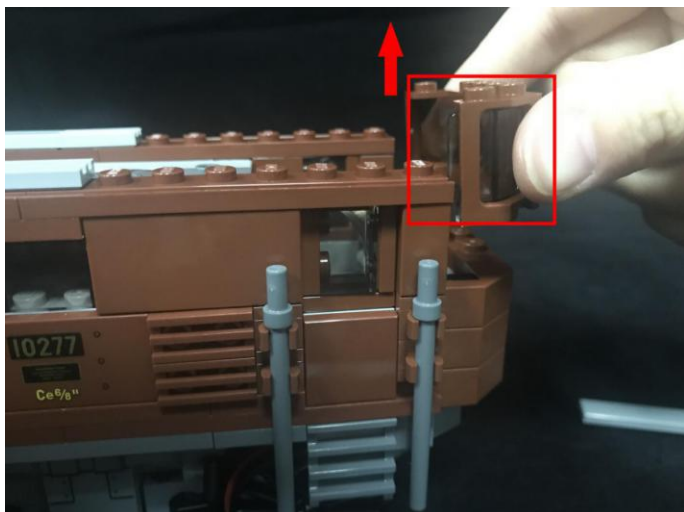


Continue to remove the gray plates from both sides.

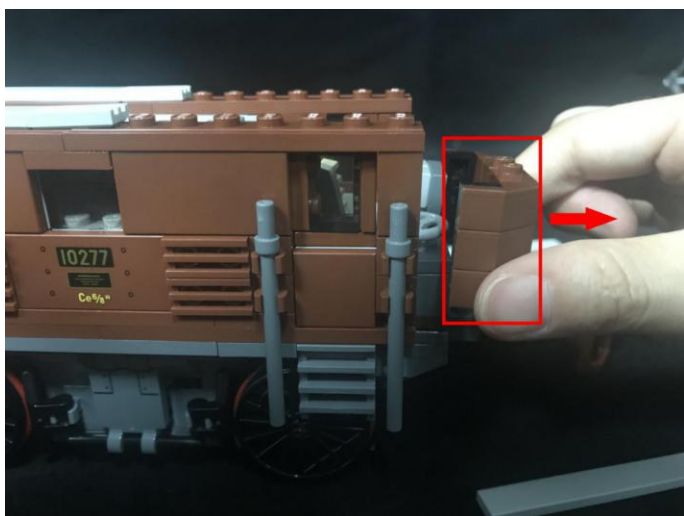


Remove the following window piece.

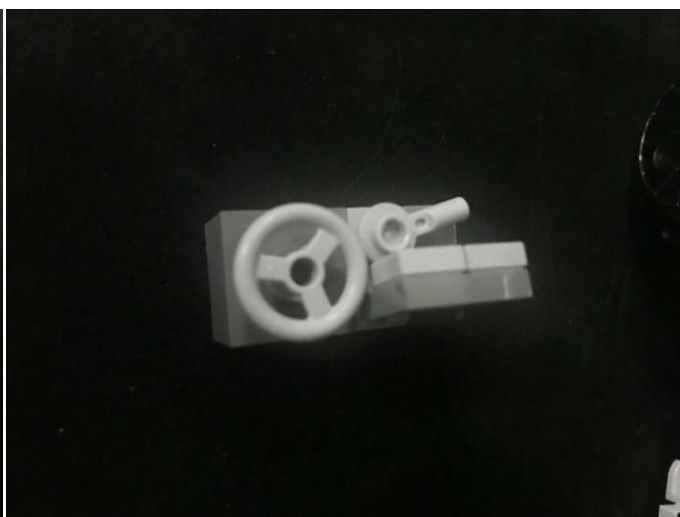
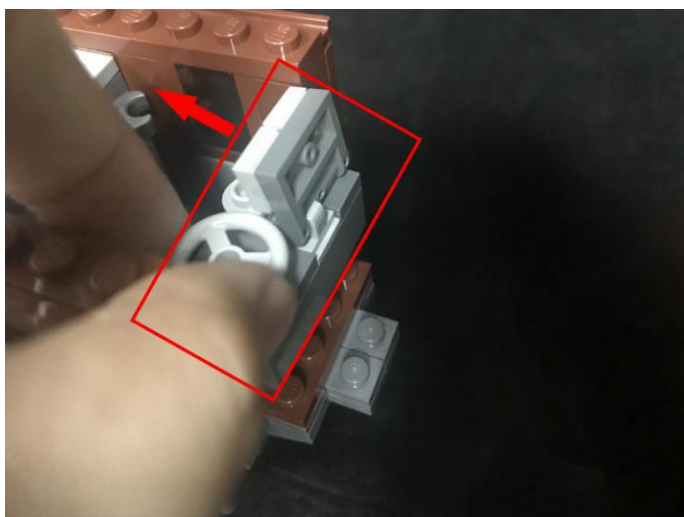




Remove the following piece marked in red.

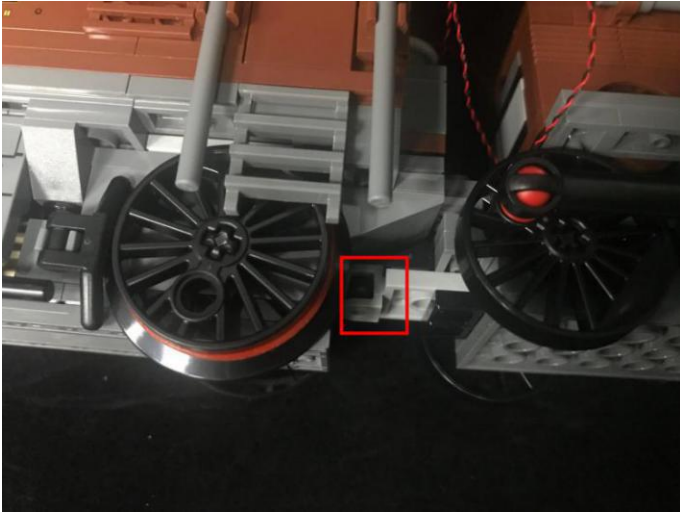


Disconnect the following piece from the driver's room.

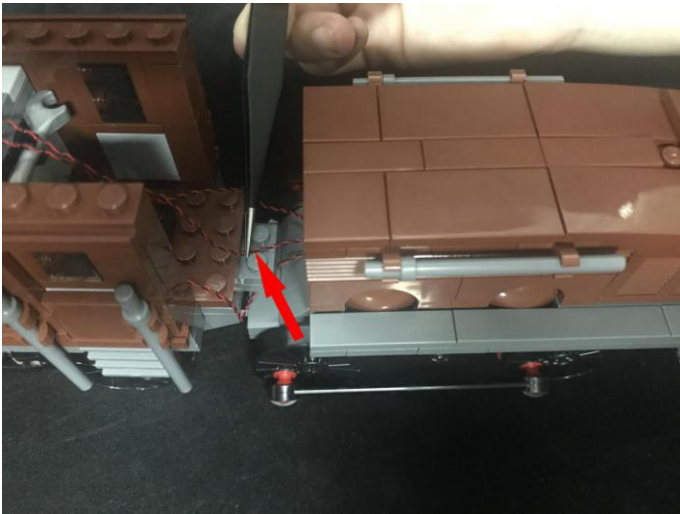


Take the number ① part, connect the head to the carriage.

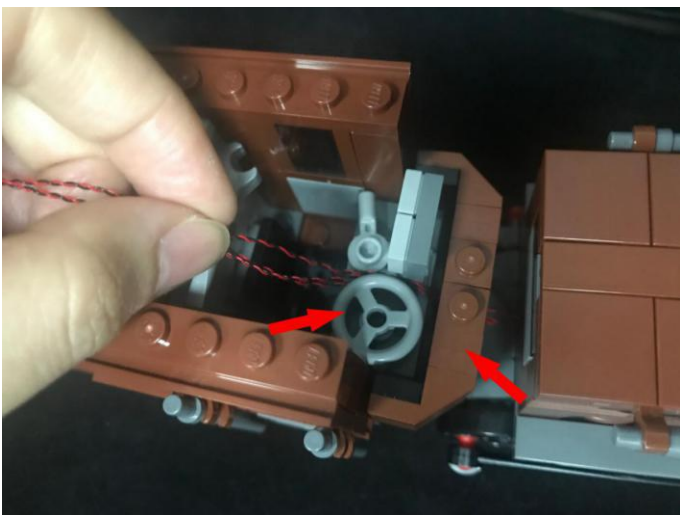




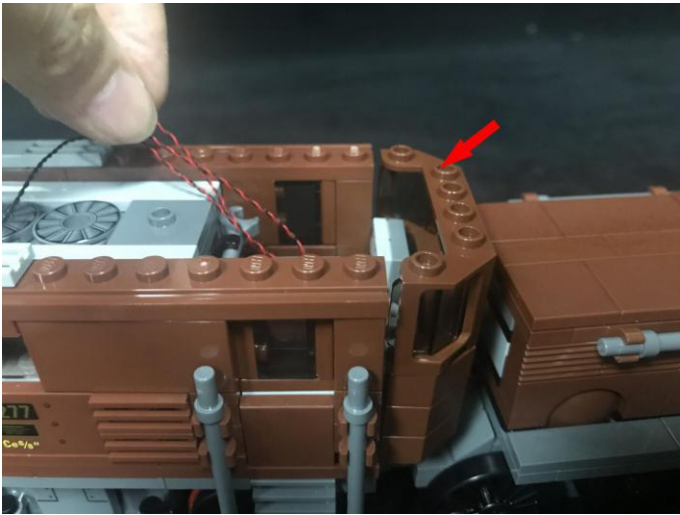
Take the tweezers (do not scratch the pieces) to help to place the 3 cables as per below.



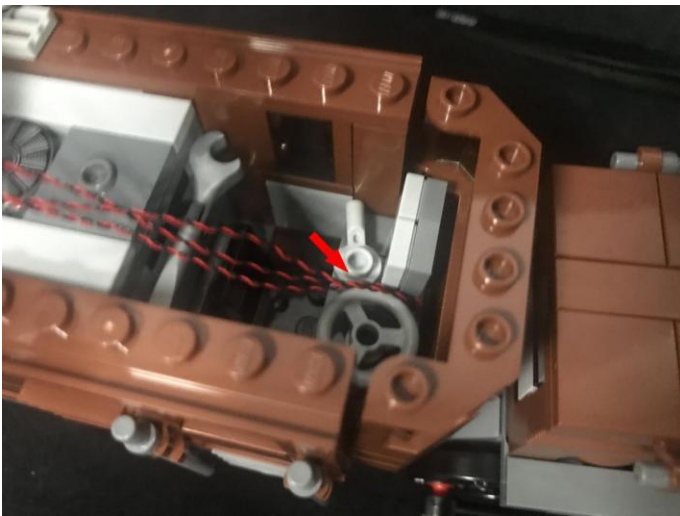
Reconnect the driver's room piece and the bottom of the window.



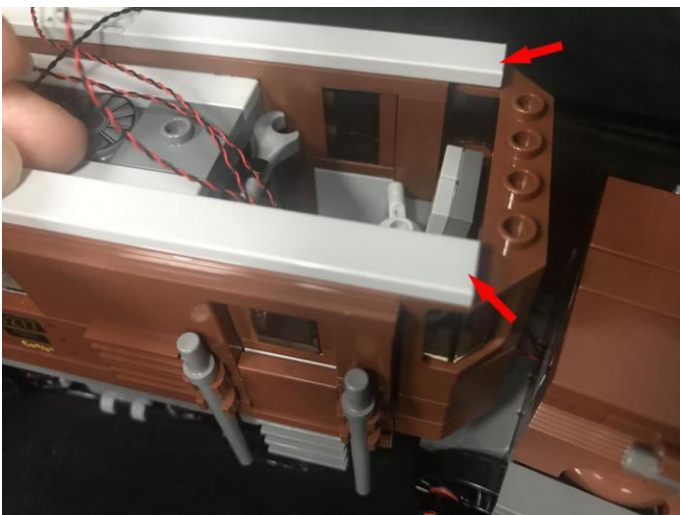
Reconnect the window.



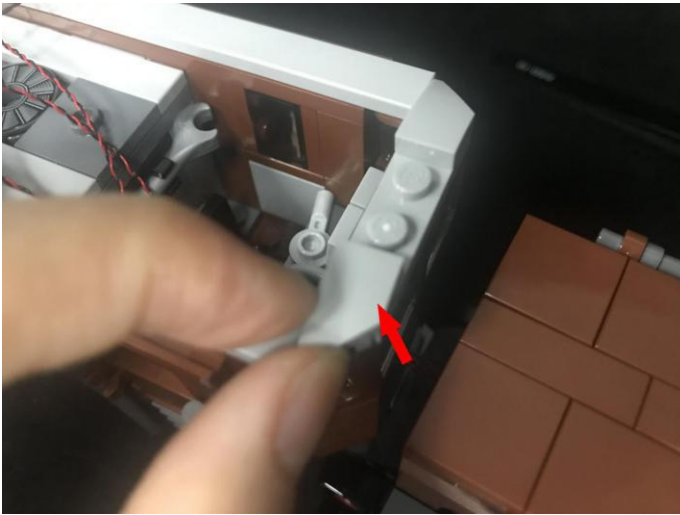
Thread the cable through the following space.



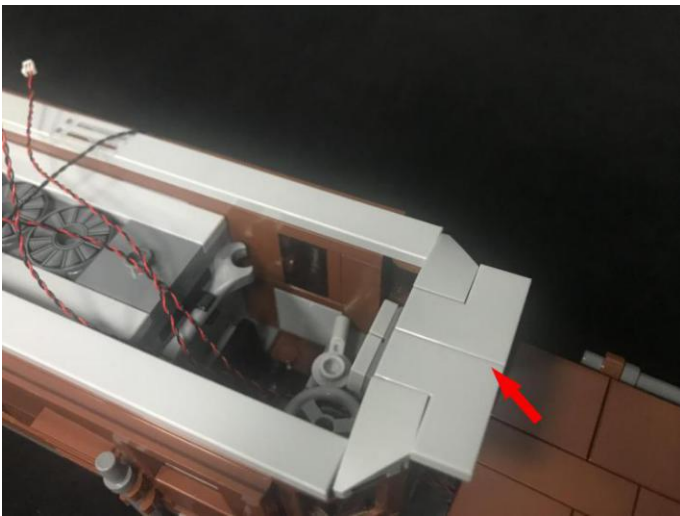
Reconnect the 2 gray plates.



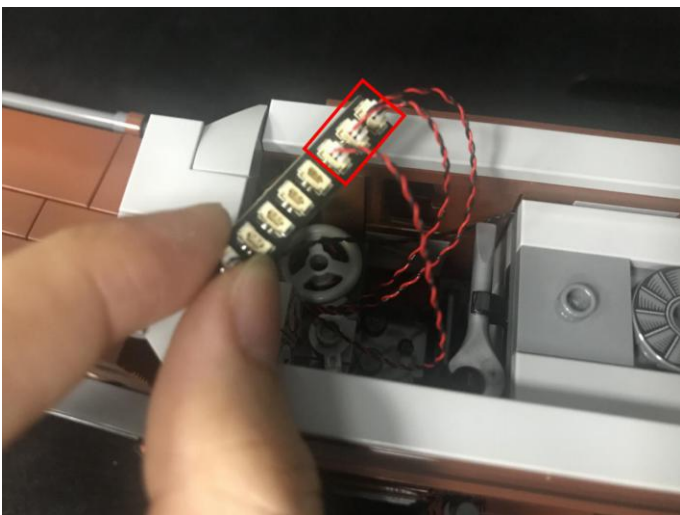
Continue to reconnect the following piece.



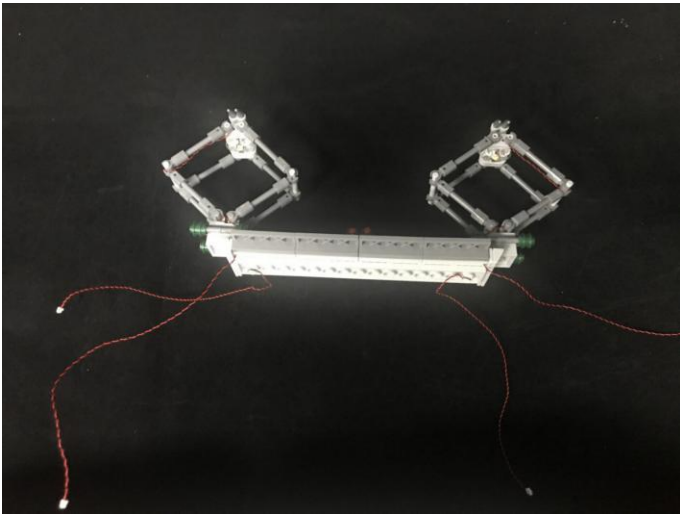
Reconnect the following piece.



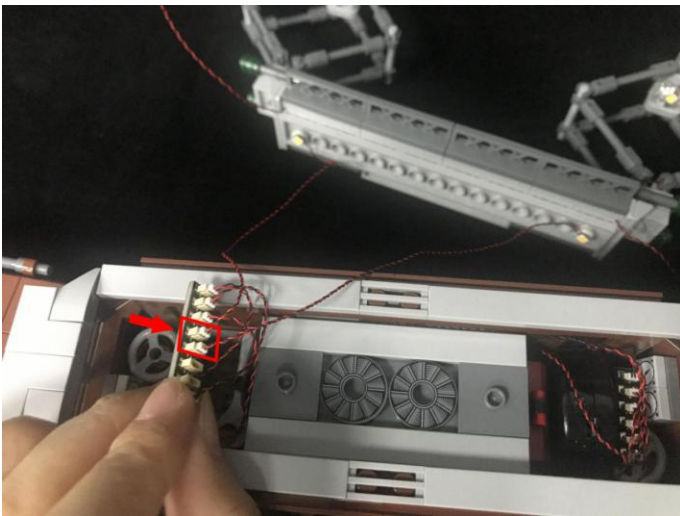
Take the 8-port expansion board, connect the cables of lights from the head to it.



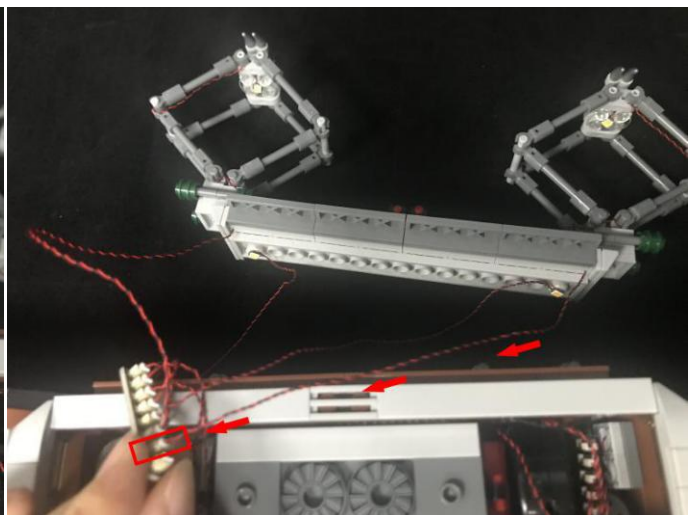
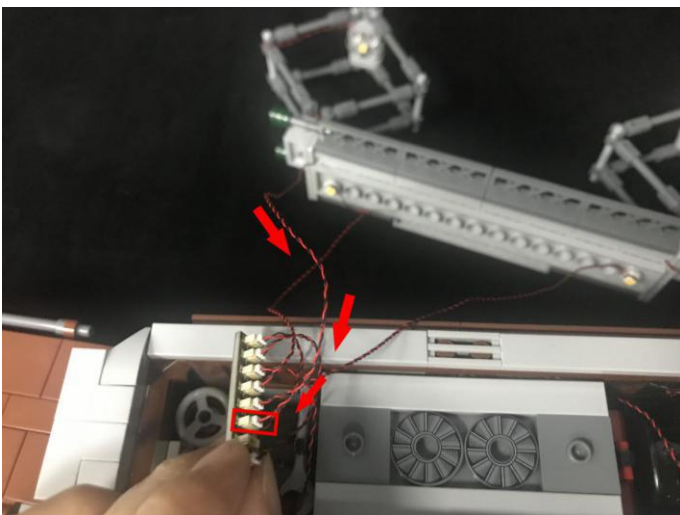
Take the roof piece.



Connect the 2 cables from the left of the roof to the 8-port expansion board.

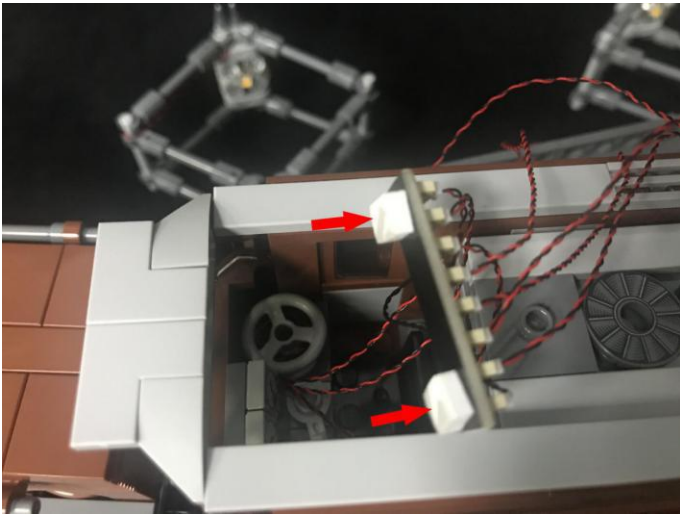


Connect the following 2 cables to the expansion board.

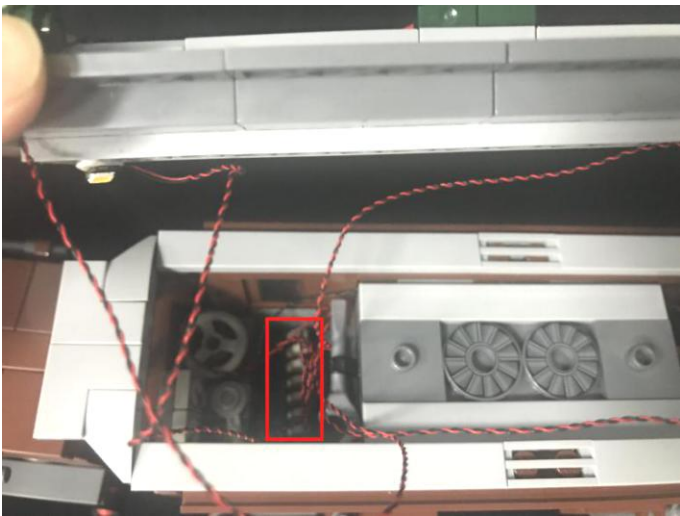


Take 2 adhesive squares, stick them underneath the expansion board.





Stick the expansion board to the seat in the driver' s room.



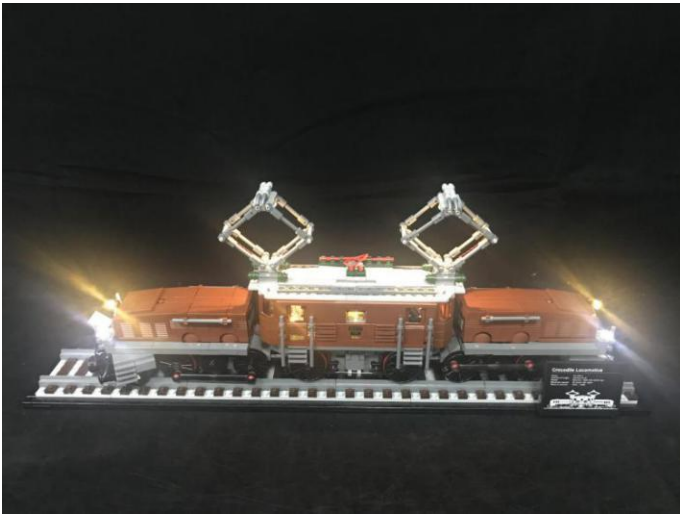
Tuck excess cables inside the carriage, reconnect the roof.



This completes installation of this lighting kit.



Turn the power on and ENJOY!



The above are ideas and instructions provided by our designers. Please move on:

1: Do you have any suggestions about the material and quality of our products?

2: Do you have any suggestions on the installation instructions and the degree of difficulty of the installation?

3: If you have better installation method and ideas, please contact us in time.