

## Hogwarts\_Express\_4841 LED Lighting Kit

### Package contents:

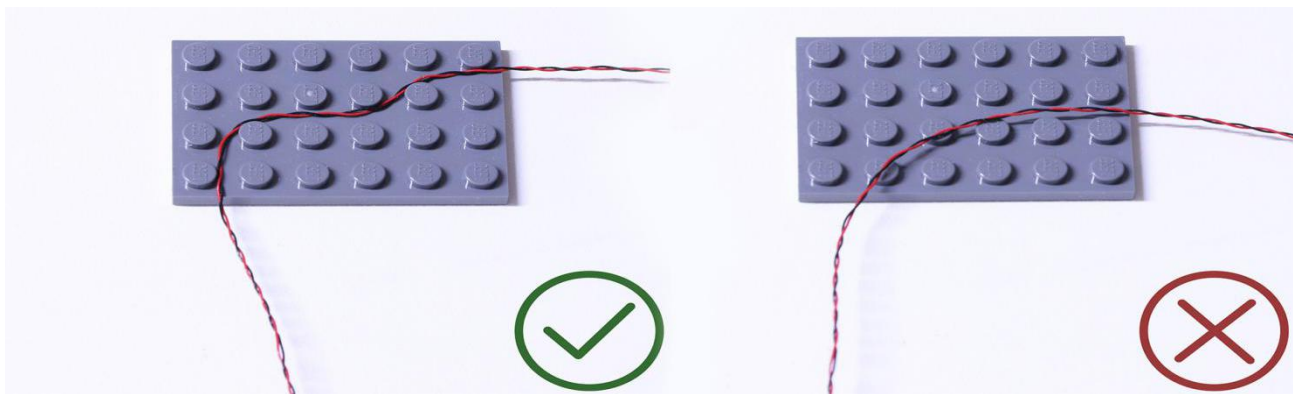
- 3 X 6-Port Expansion Board
- 2 X Flat Battery Pack
- 1 X Round Coin Cell Battery Pack
- 3 X Warm White 30cm Dot Lights
- 4 X Warm White 15cm Dot Lights
- 2 X White 15cm Dot Lights

Extra LEGO pieces

### Note:

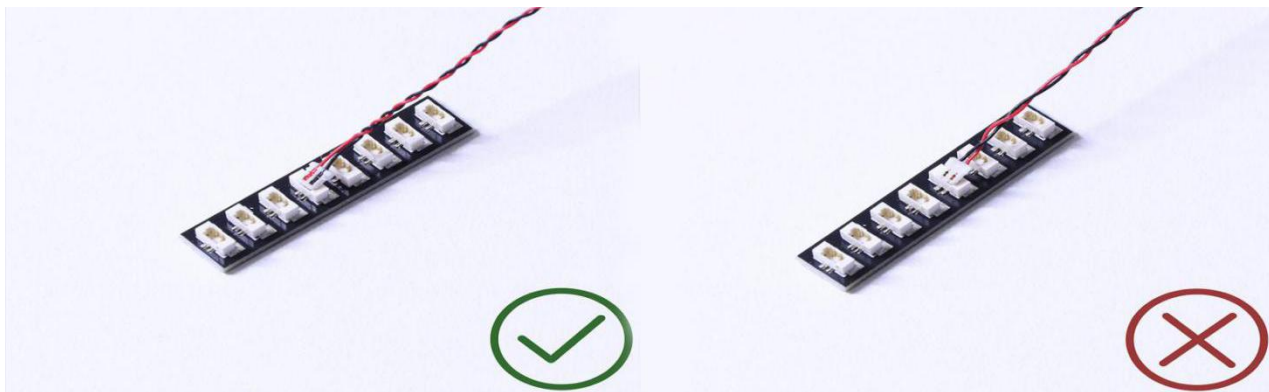
Place wires on the surface or under the LEGO building blocks.

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

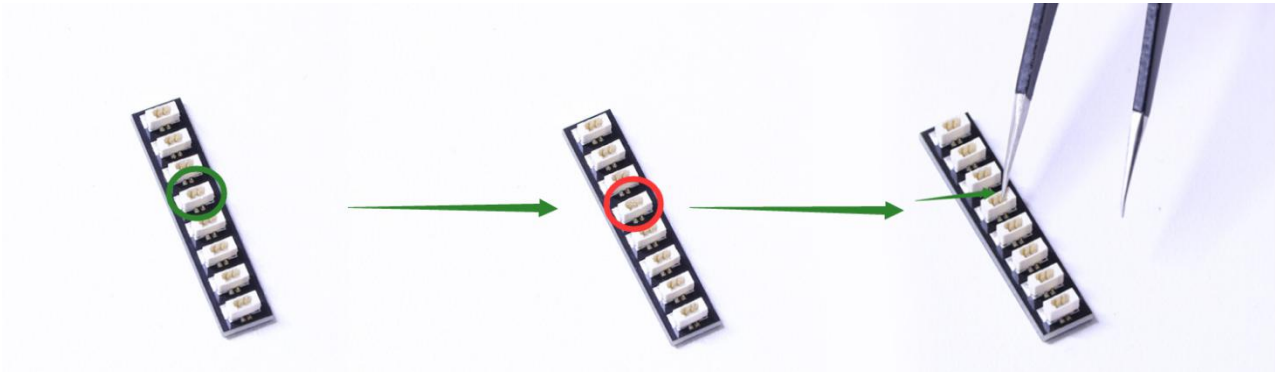


Insert the connectors to the ports.

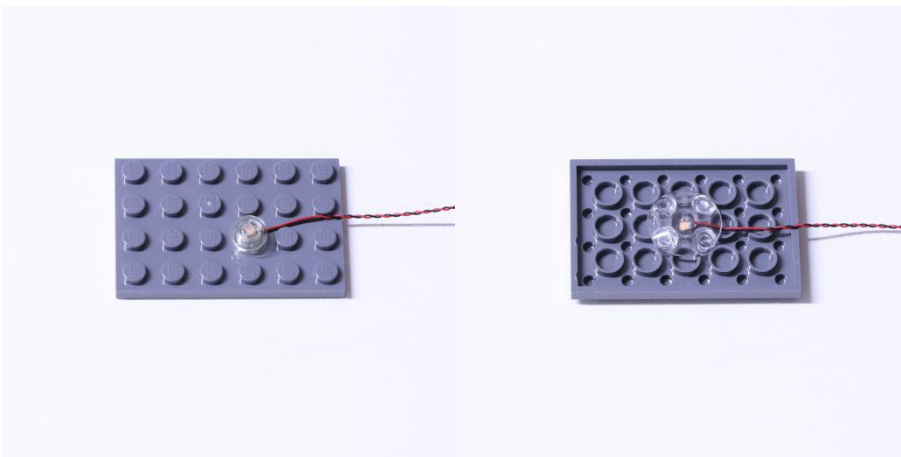
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, 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.

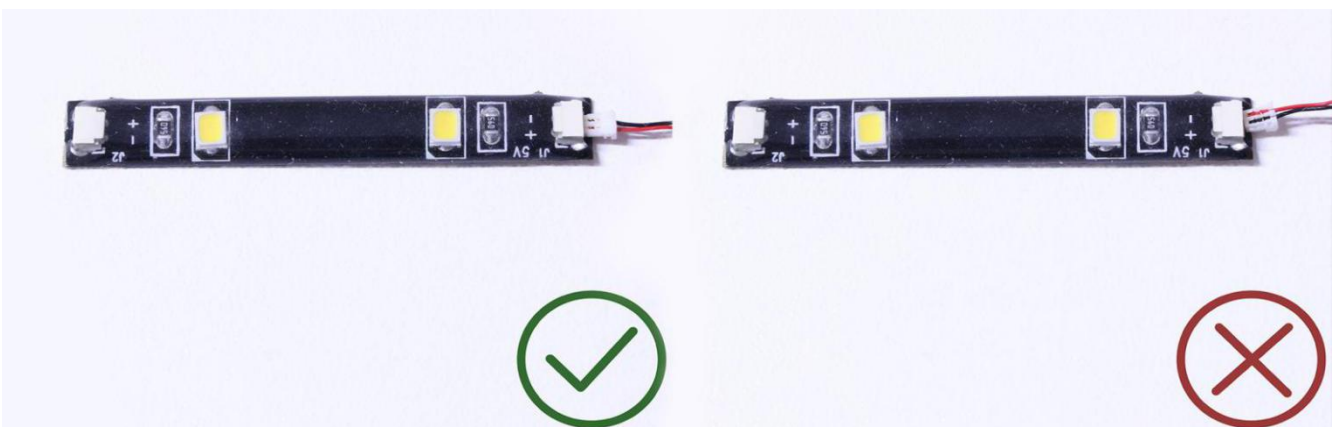


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

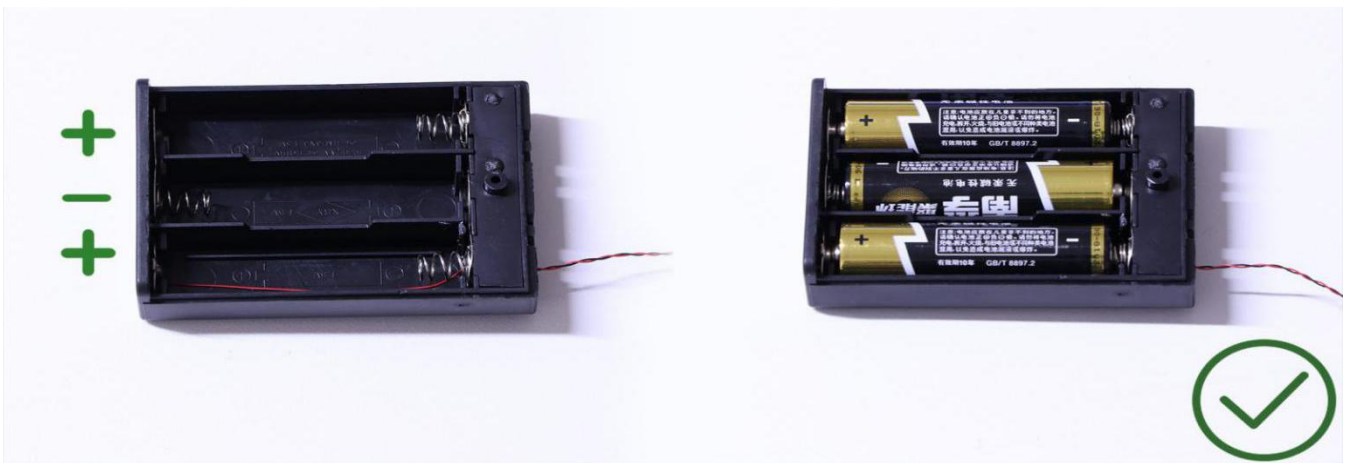


## Connecting cable connectors to Strip Lights

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.



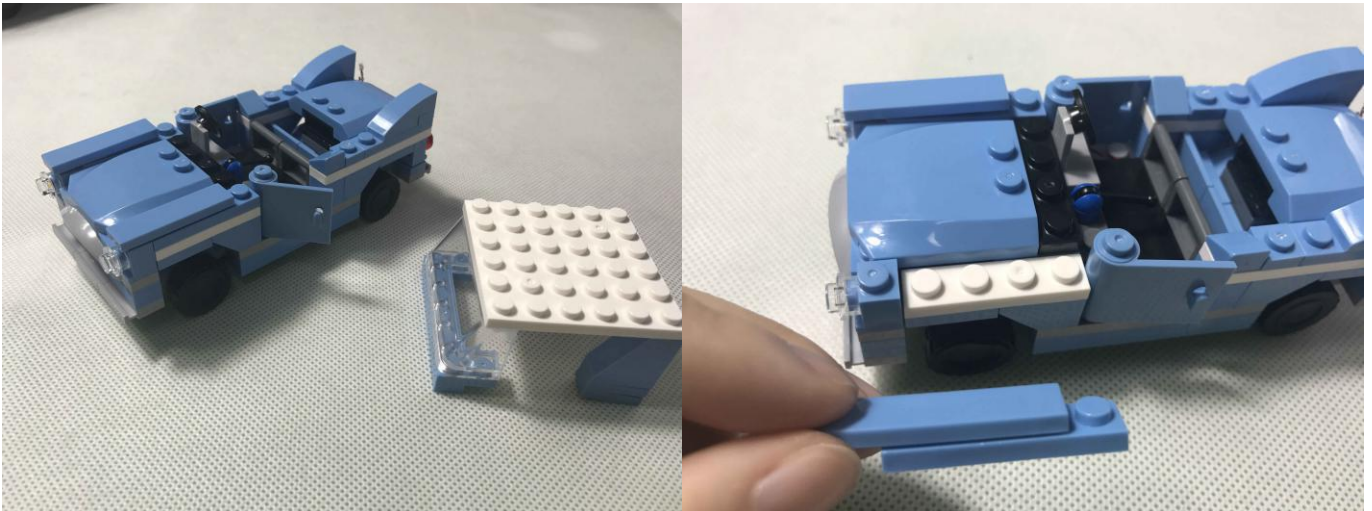
OK, Let's Begin!

**Instructions for installing this kit**  
We' ll start from the headlights.

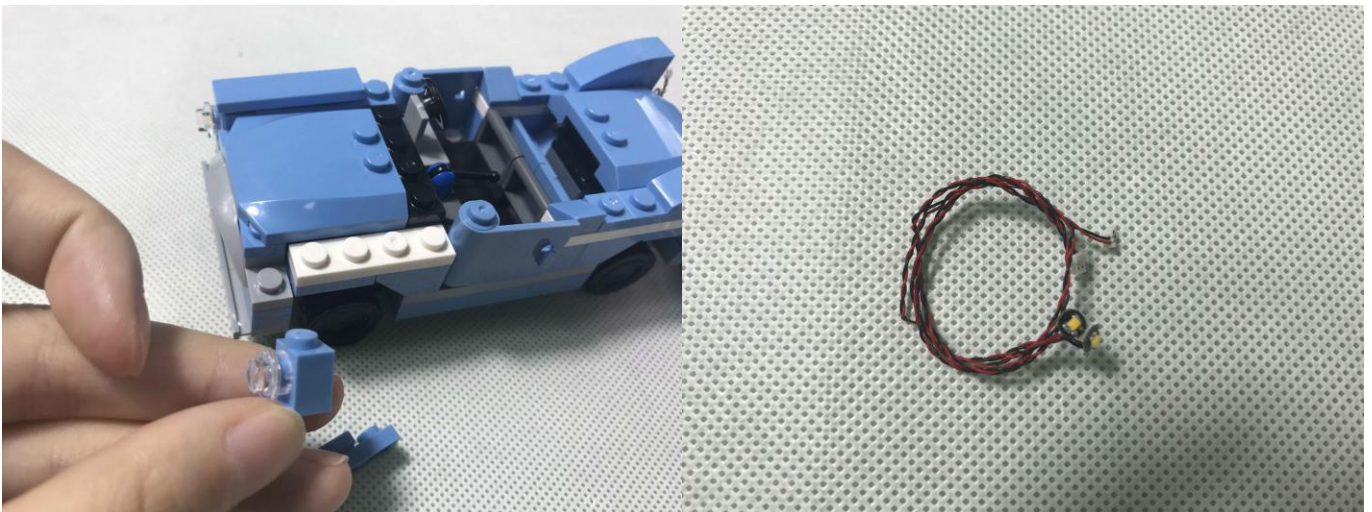




Remove the roof of the car, and the blue piece at the right side

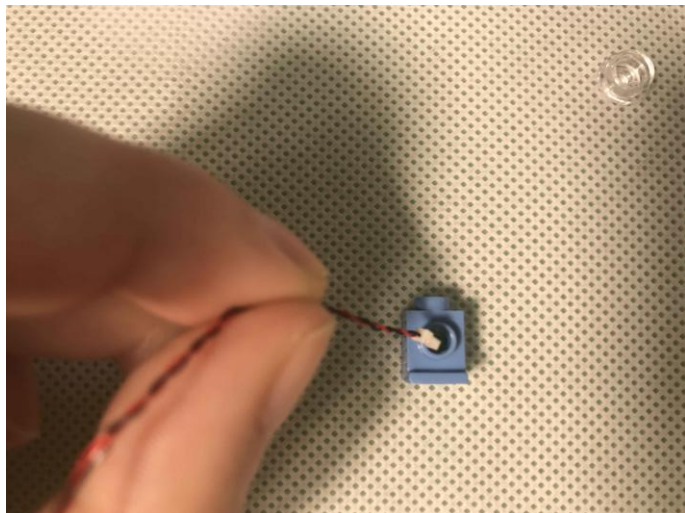


Continue to remove all the lights. Take 2 Warm White 15cm Dot Lights



Disconnect the trans clear piece, then, take a warm white Dot Light, thread its connector through the hole of the blue piece, with its LED component facing up. Pull till the light is placed right over the hole.



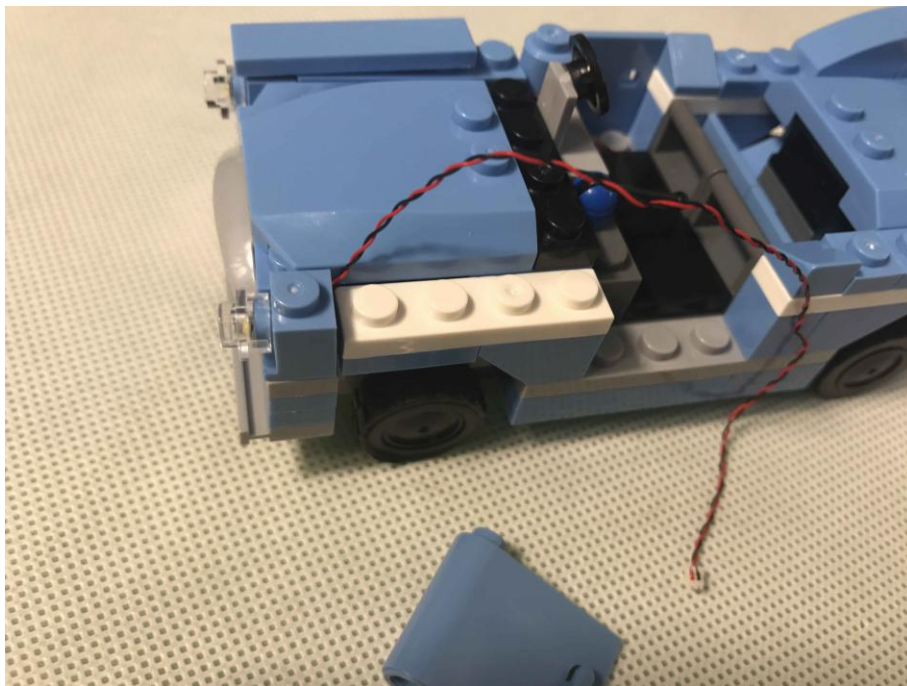


Secure it by reconnecting the trans clear piece

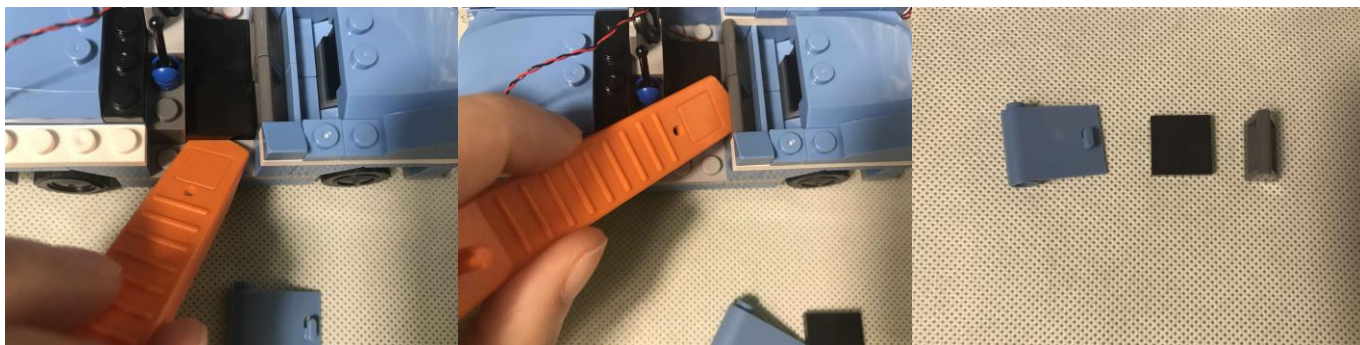


Reconnect the light, remove the door

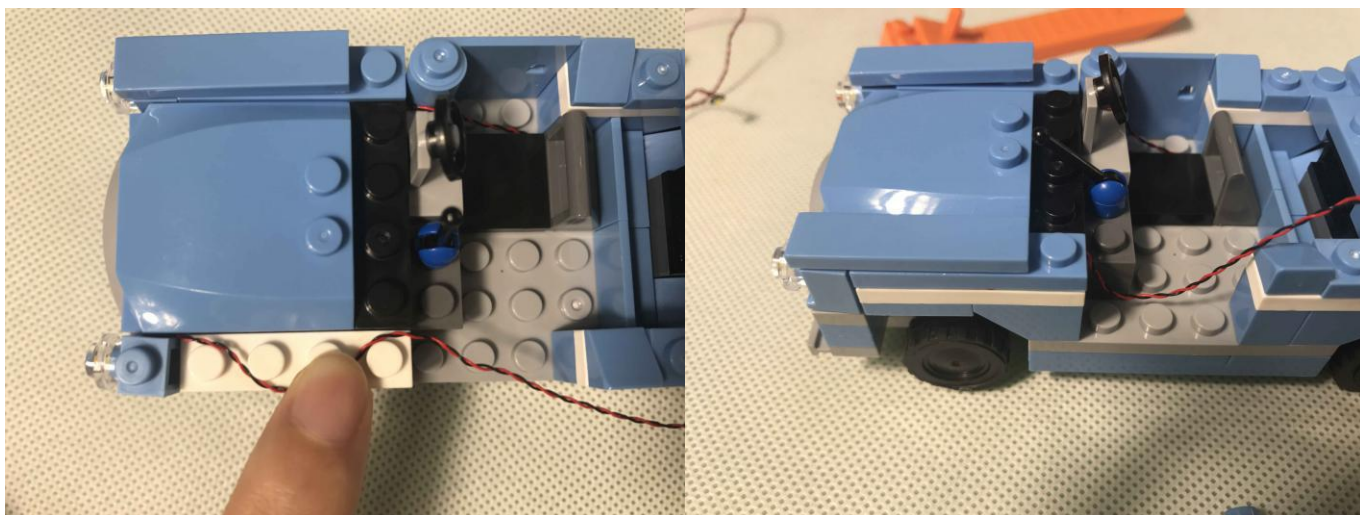




Disconnect the black plate and the gray piece inside the control room

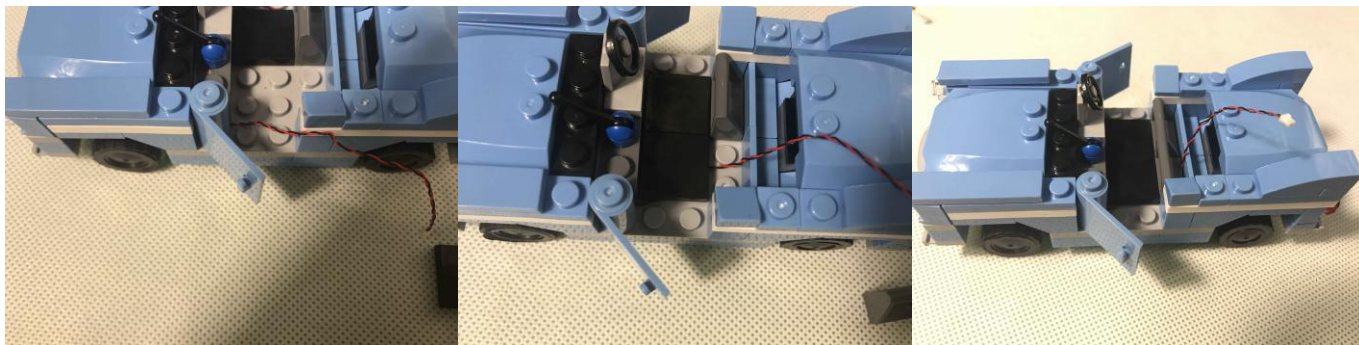


Place the cable in between studs, as per below, connect the blue pieces over it to hide it



Reconnect the door, the black plate, and the gray piece, place the cable underneath in between studs

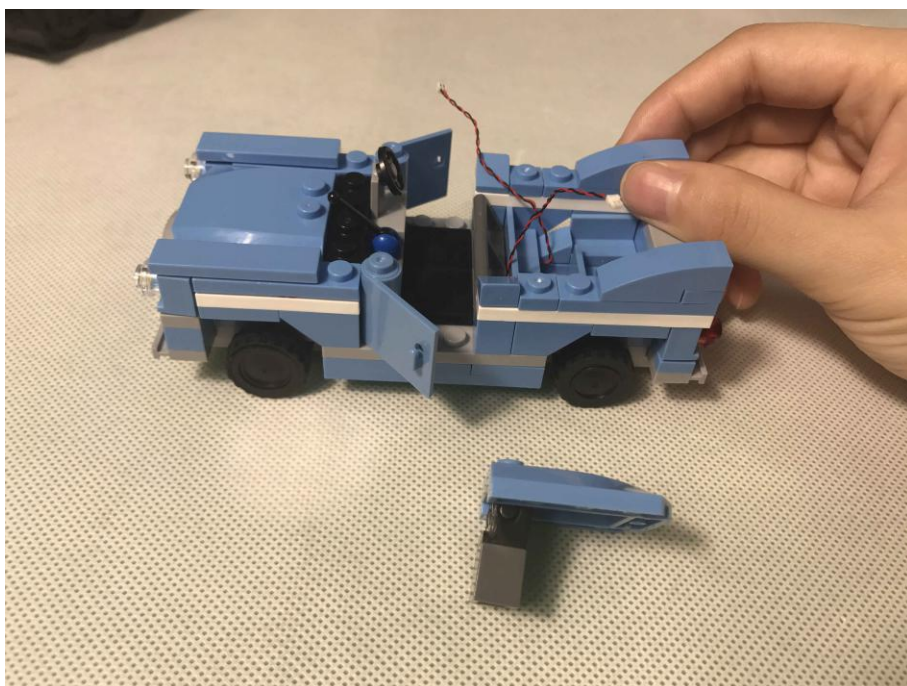




Take another warm white Dot Light, repeat the steps above for the headlight at the right

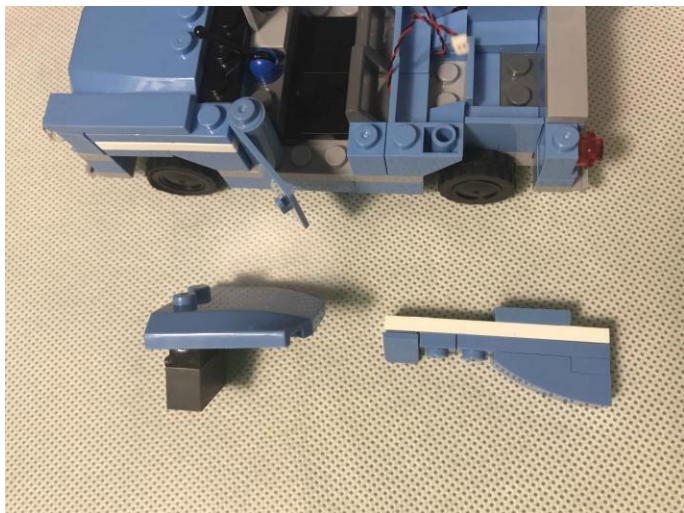


Now, the installation of headlights is completed, we' ll move onto install the tail lights. Remove the cover of the boot

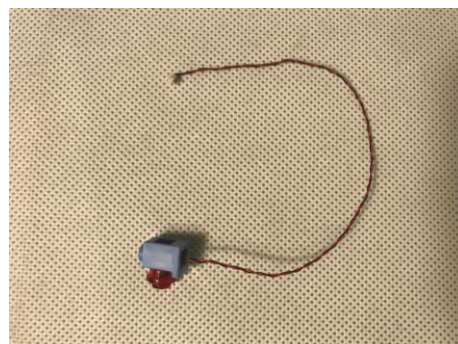
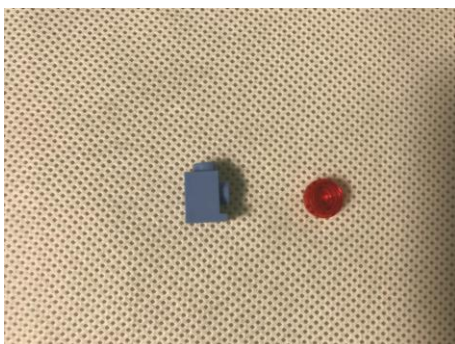


Remove the pieces at the left side, remove the tail light, as per below

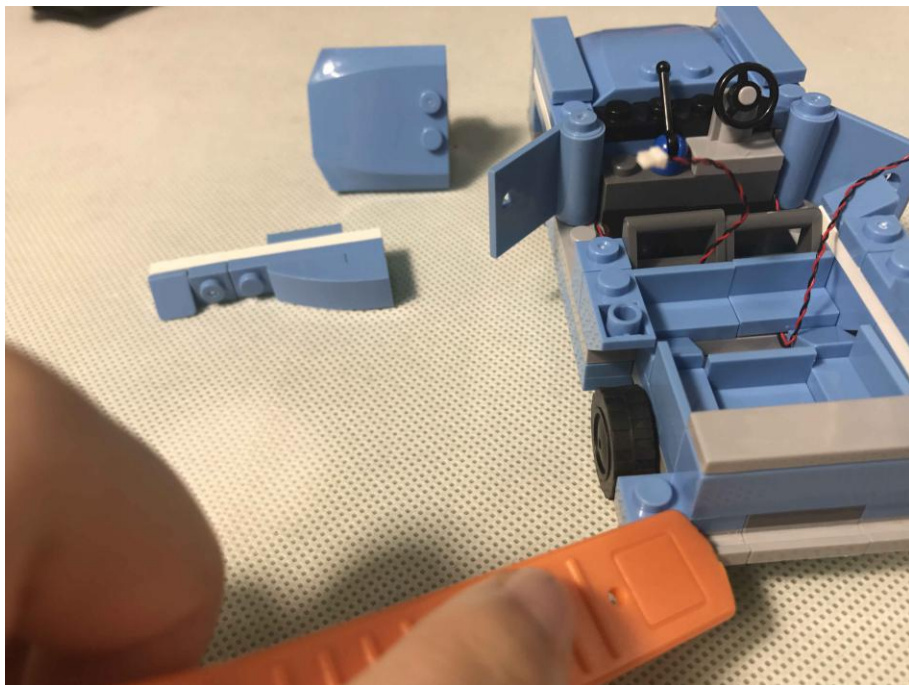




Take 2 white 15cm Dot Lights, repeat the steps we did for installing the headlights to install the taillights

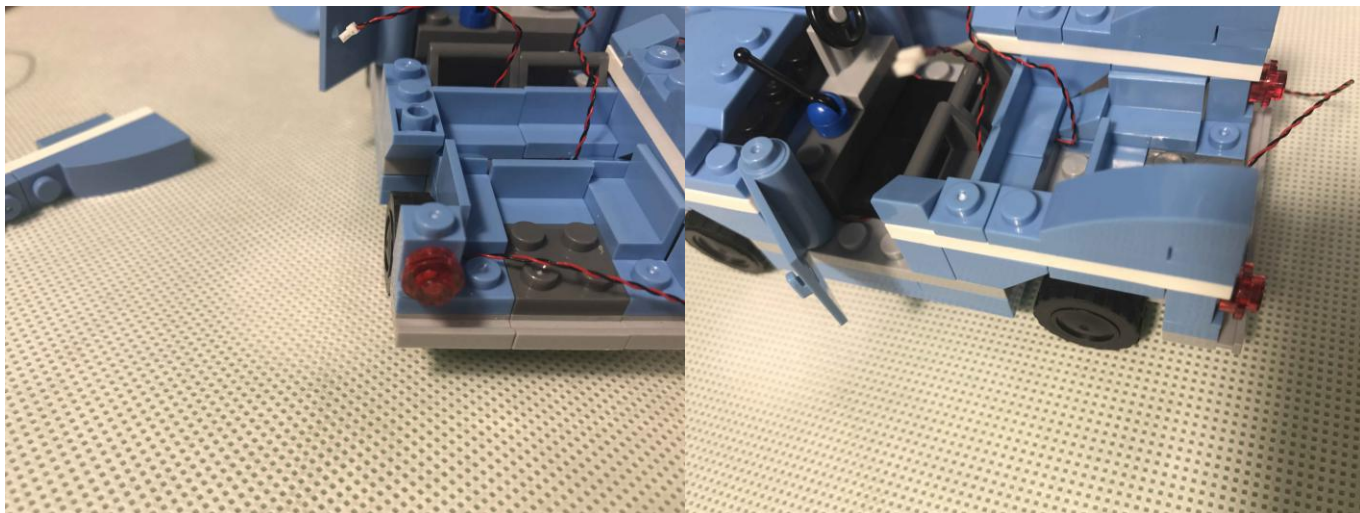


Remove the bluish gray plate at the back of the car

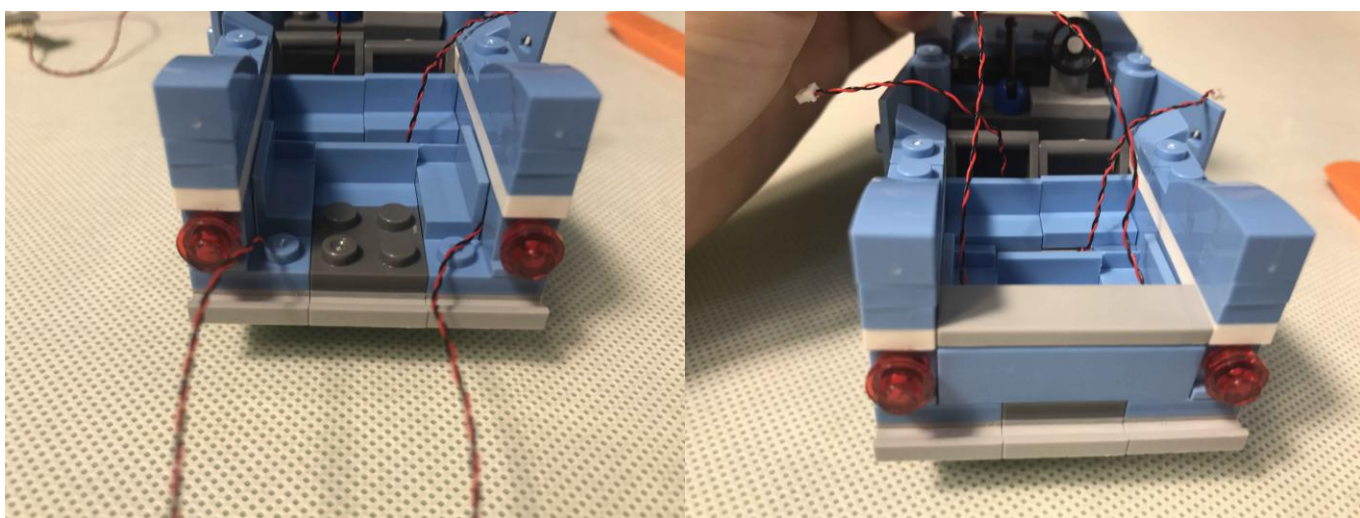


Reconnect the tail light, place the cable at right side, reconnect the pieces at the left

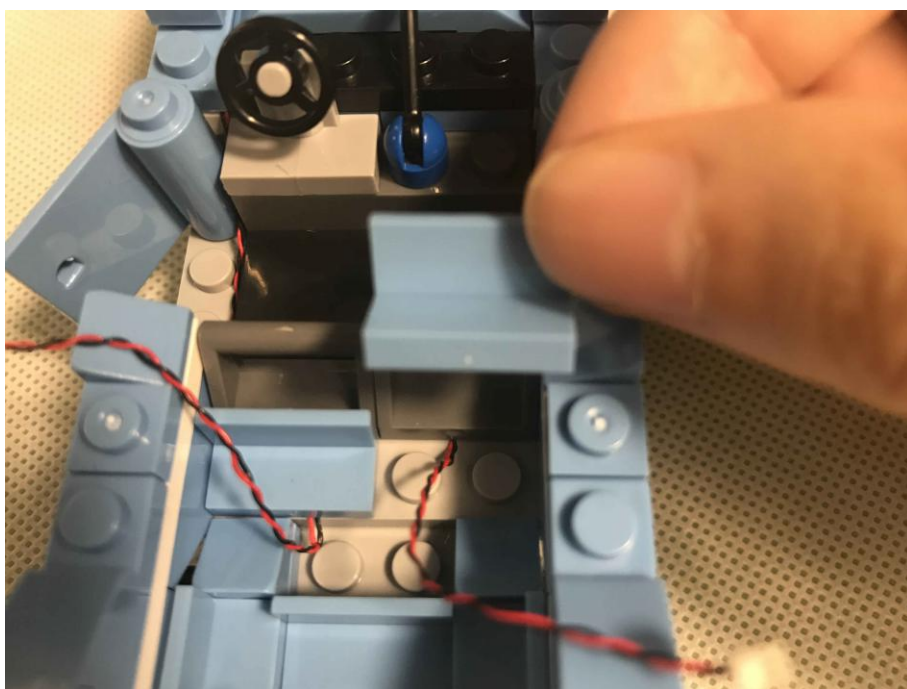




Repeat the previous steps to install the tail light at the right side. Reconnect everything at the back of the car

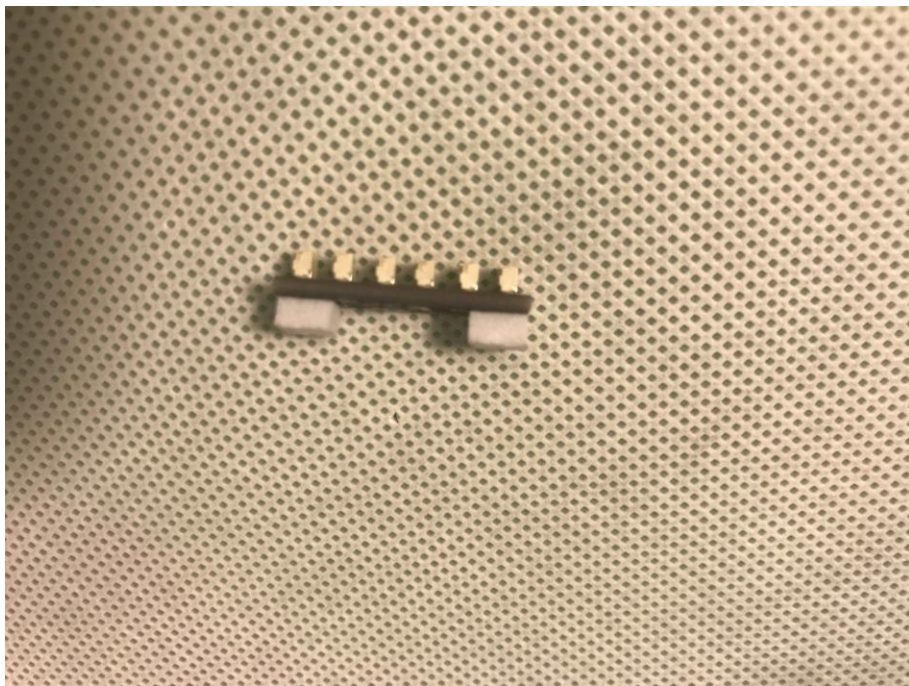


Hide the 2 cables of the headlights underneath the following blue piece

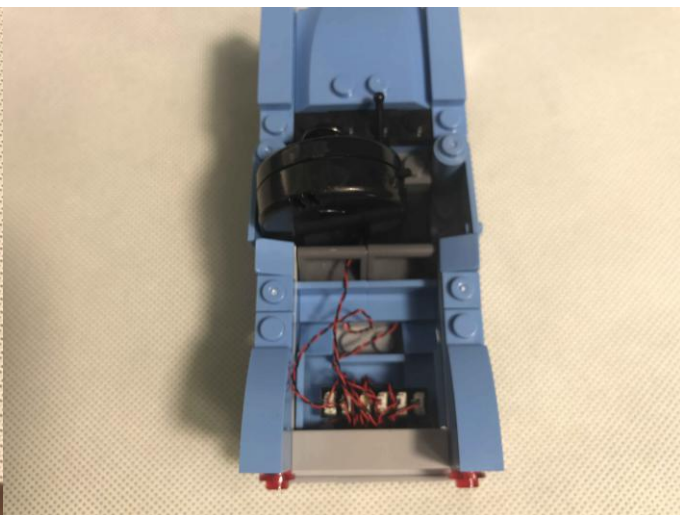
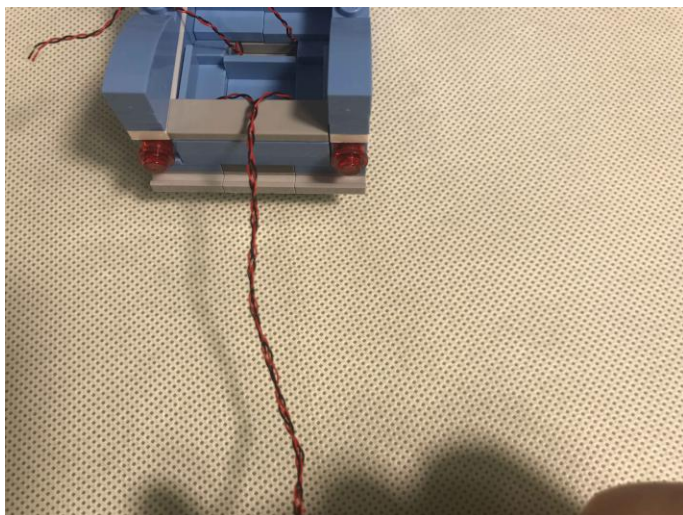


Take 6-port expansion board and 2 adhesive tapes, stick the tapes at the back of the expansion board

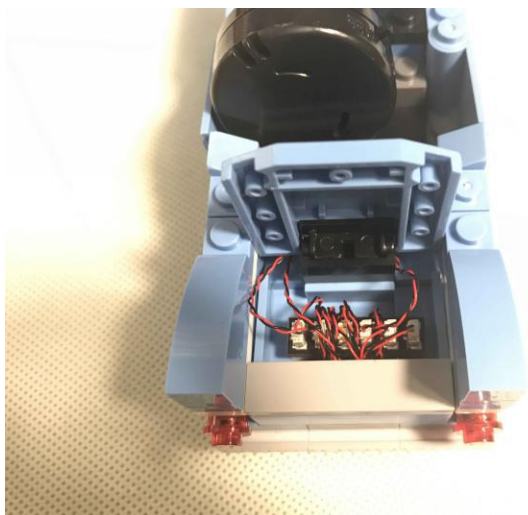




Twist the 2 cables of the tail lights together, tuck them around the expansion board. Connect all the 4 cables of the lights to the expansion board. Then, insert the Round Coin Cell Battery Pack with batteries, connect its connector to the expansion board, stick the expansion board inside the boot



Reconnect the cover of the boot, tuck the cables inside the boot



Reconnect the roof, this completes the installation of the lights of the car. You can turn on and enjoy it





Now, we can continue to install the headlights of the train

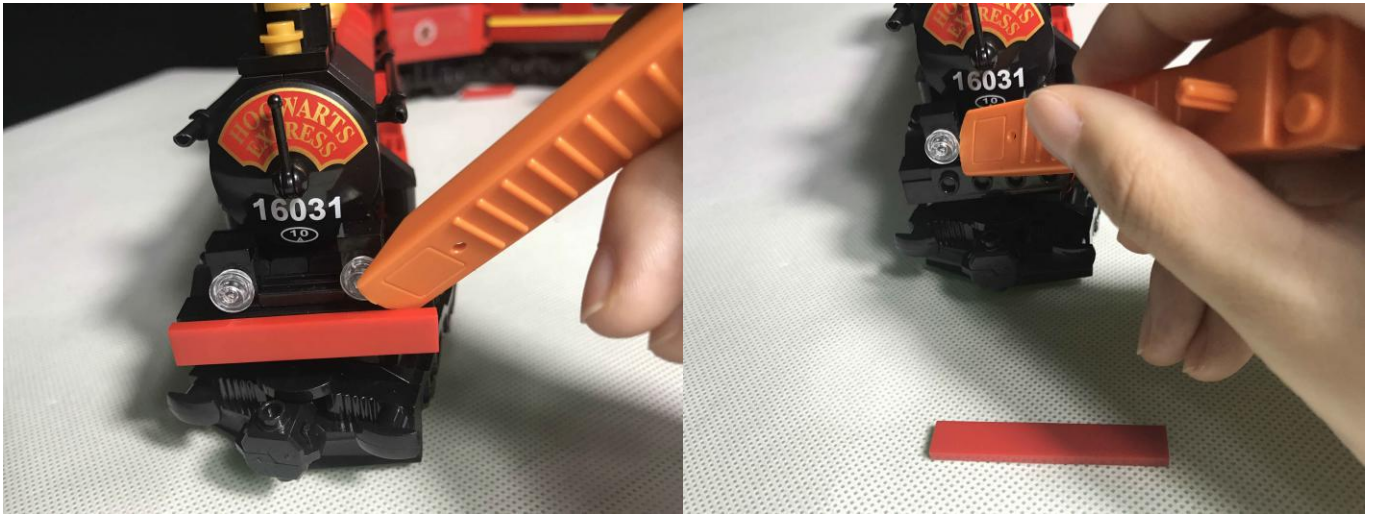


Taka 2 warm white 15cm Dot Lights

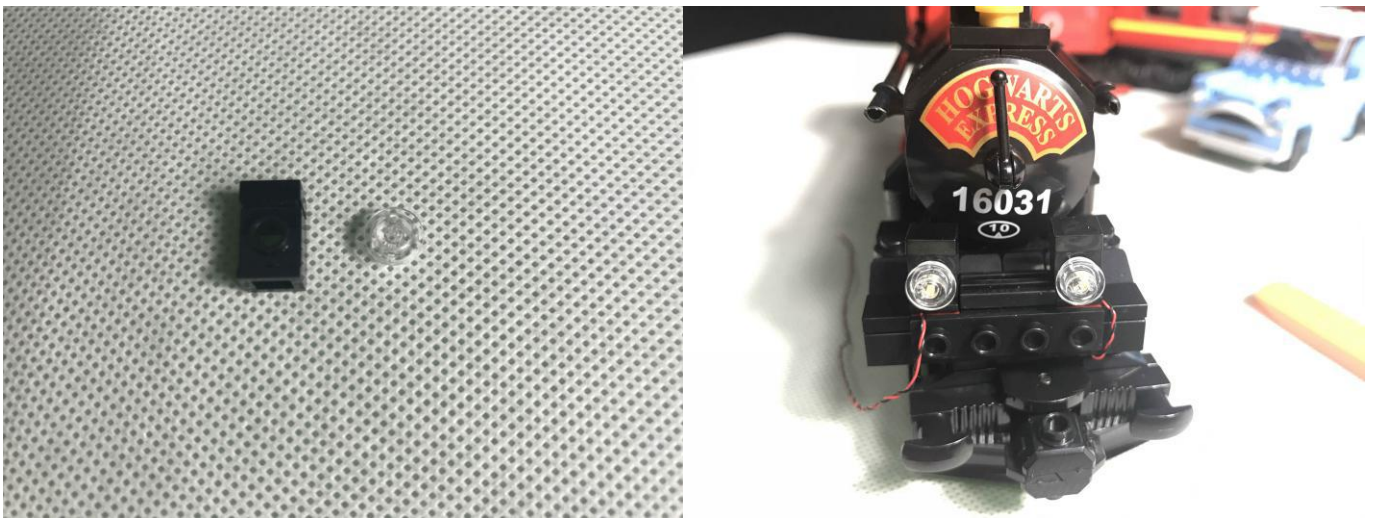




Remove the red plate and the light at the right



Repeat the previous steps we did for installation of the headlights to install the 2 lights

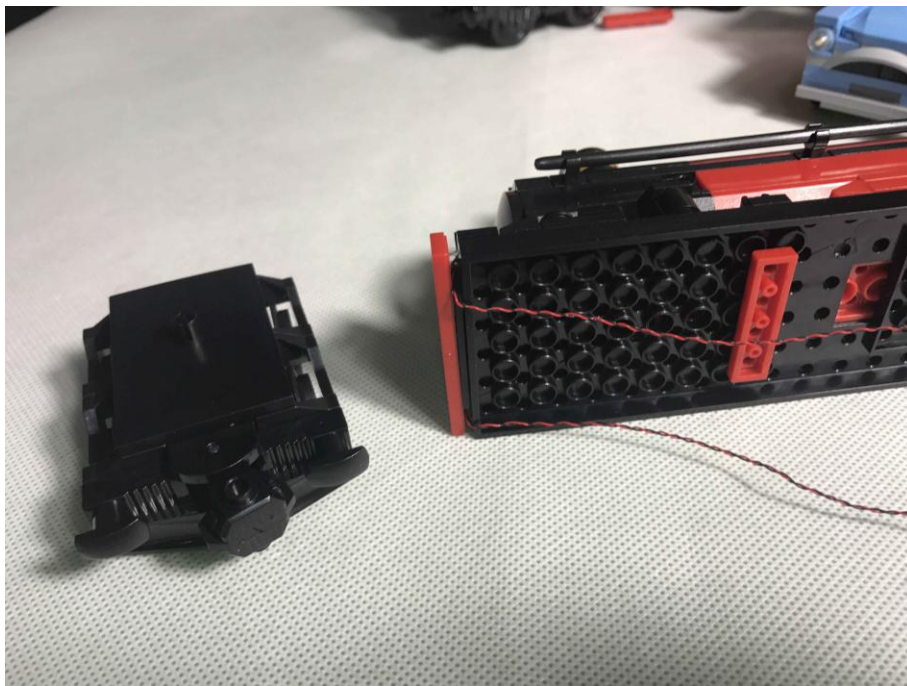


Reconnect the red plate

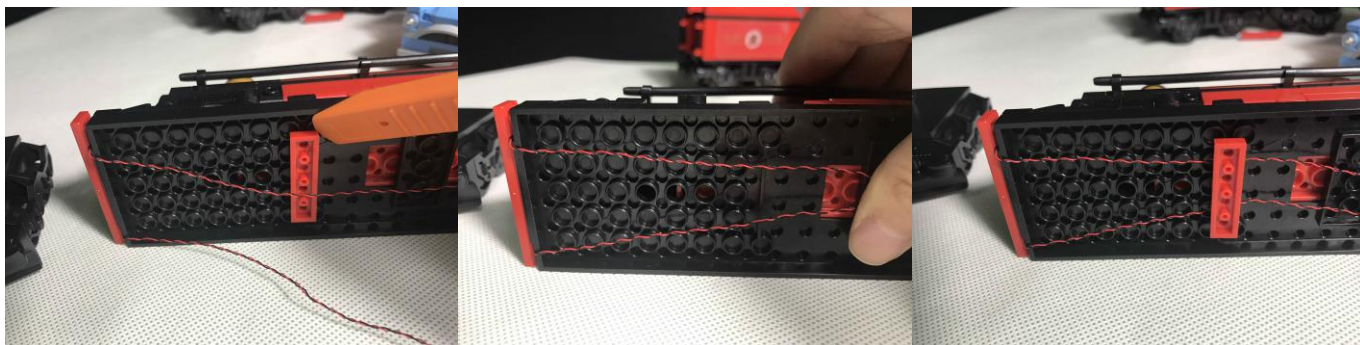


Turn the train over, remove its wheel





Remove the red plate at the bottom of the train, press the 2 light cables underneath it



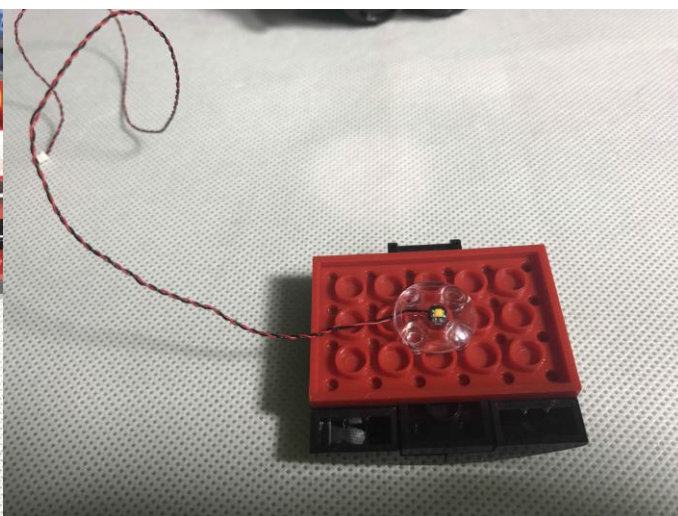
Reconnect the wheel, our installation of the headlights is finished



Turn to the back of the train, take a 30cm warm white Dot Light, and a 2x2 round plate



Remove the roof of the train, secure the Dot Light at the bottom of the roof by placing the round plate over it, ensuring the LED component facing up

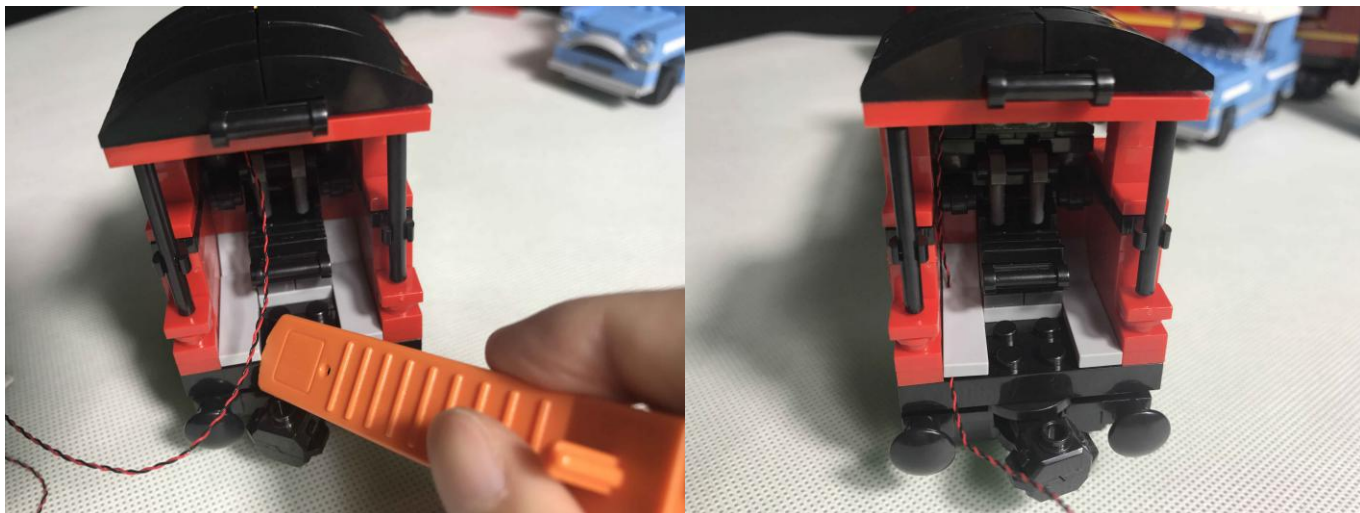


Reconnect the roof, then thread the cable through the gap between the roof and the left wall

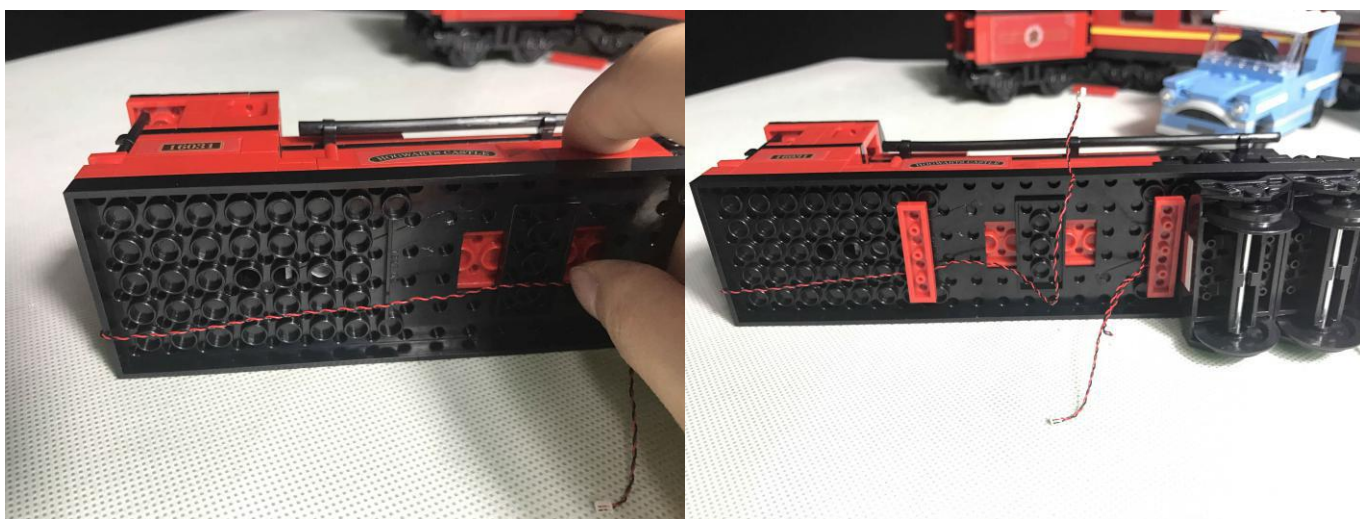
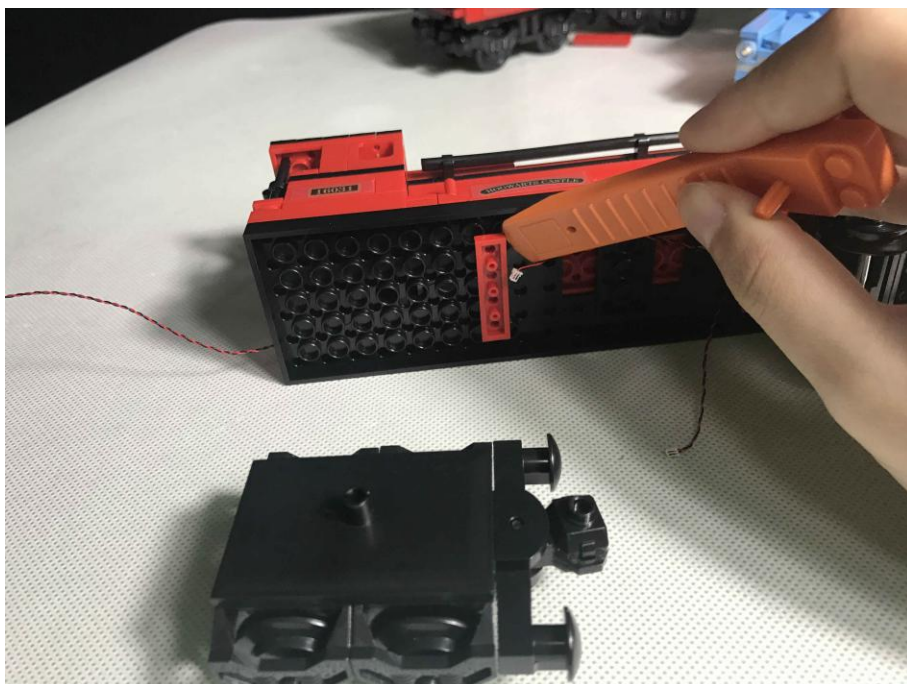


Remove the gray plate inside the train, place the cable underneath it





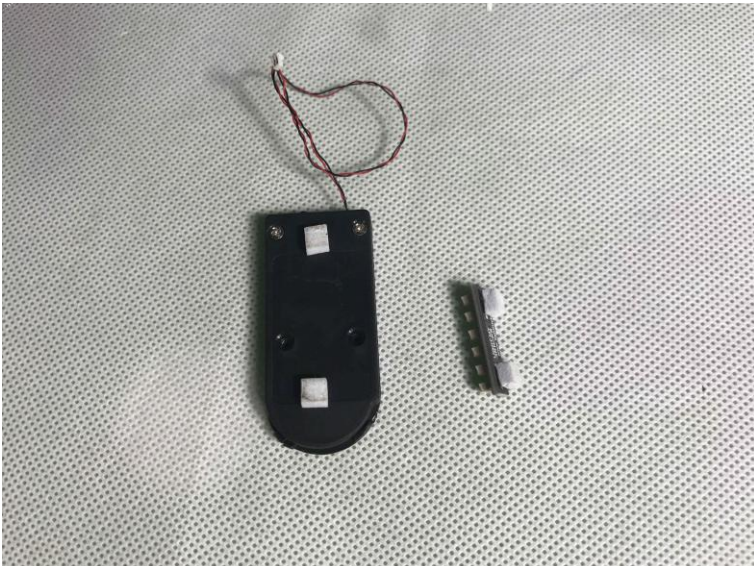
Turn the train over, remove the wheel, secure the cable underneath the red plate, as we did before



Reconnect the wheel



Take the Flat Battery Pack, insert it with batteries, take a 6-port expansion board, stick adhesive tapes at the back of the battery pack and the expansion board



Connect all the cables to the expansion board, tuck the excess cables around the expansion board, stick the expansion board and the battery pack at the bottom of the train



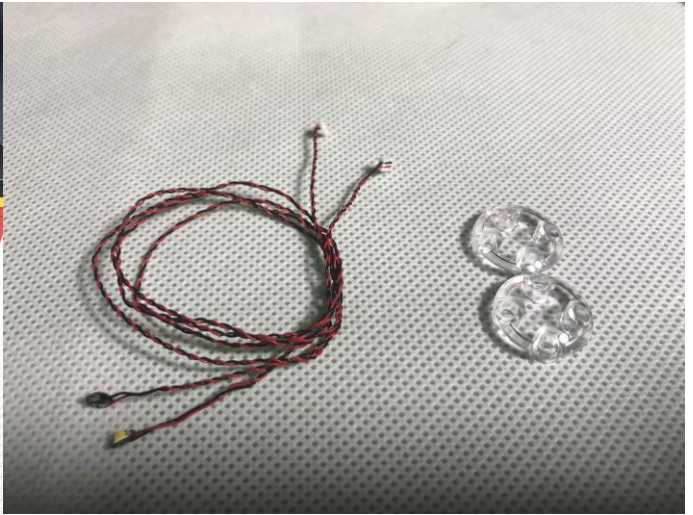


Now, we have already finished the installation of the lights for the first section of the train

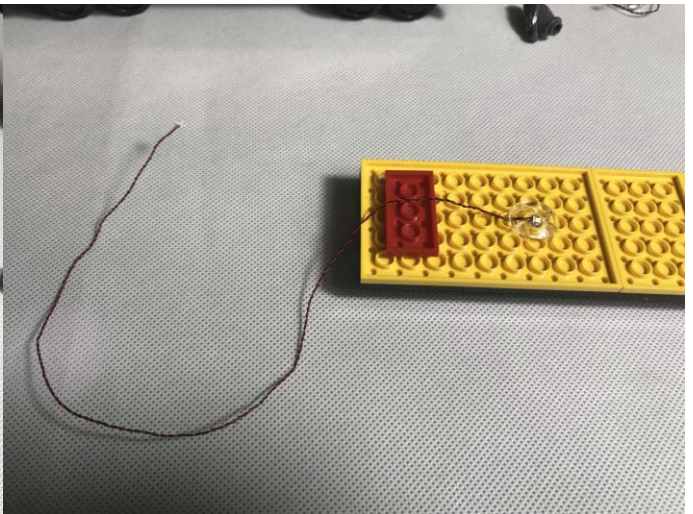


We are going to install lights for the last section. Take 2 warm white 30cm Dot Lights, 2 round 2x2 plates

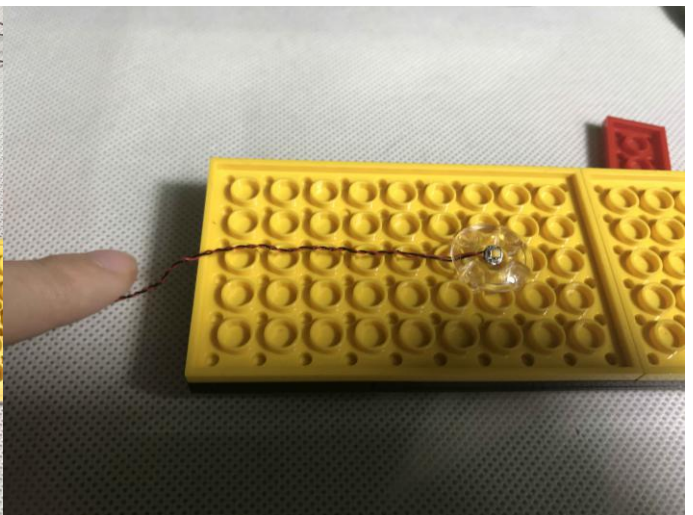
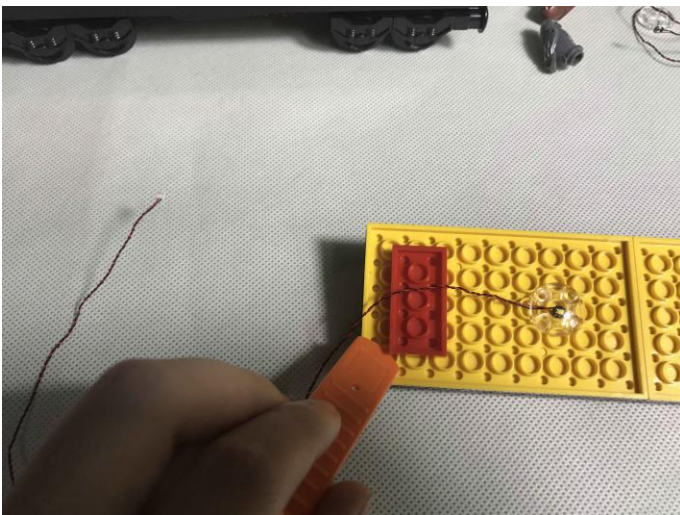




Remove the roof, connect the Dot Light at the bottom of the roof as we did before

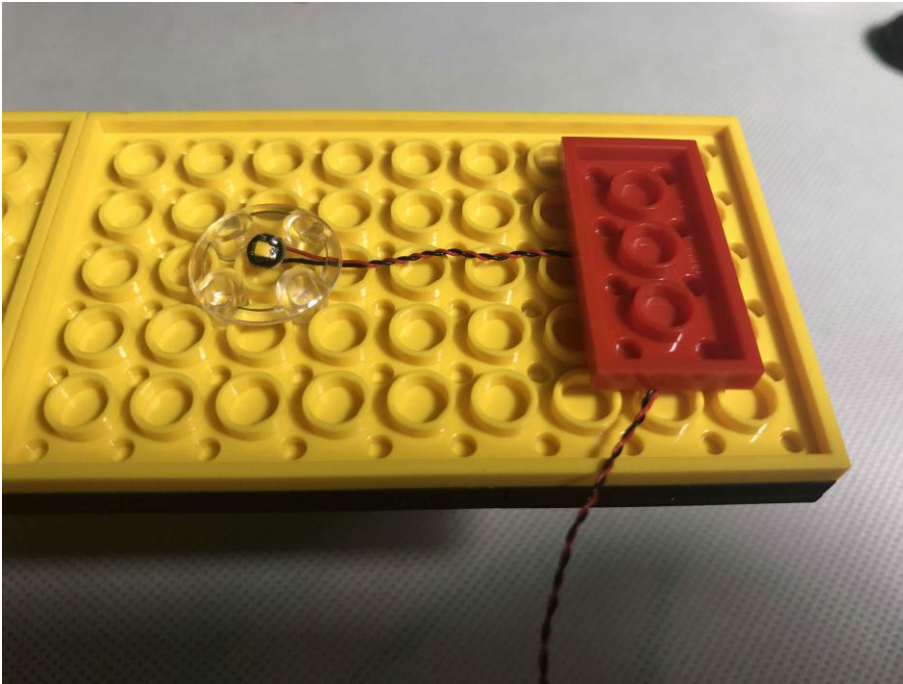


Remove the red plate

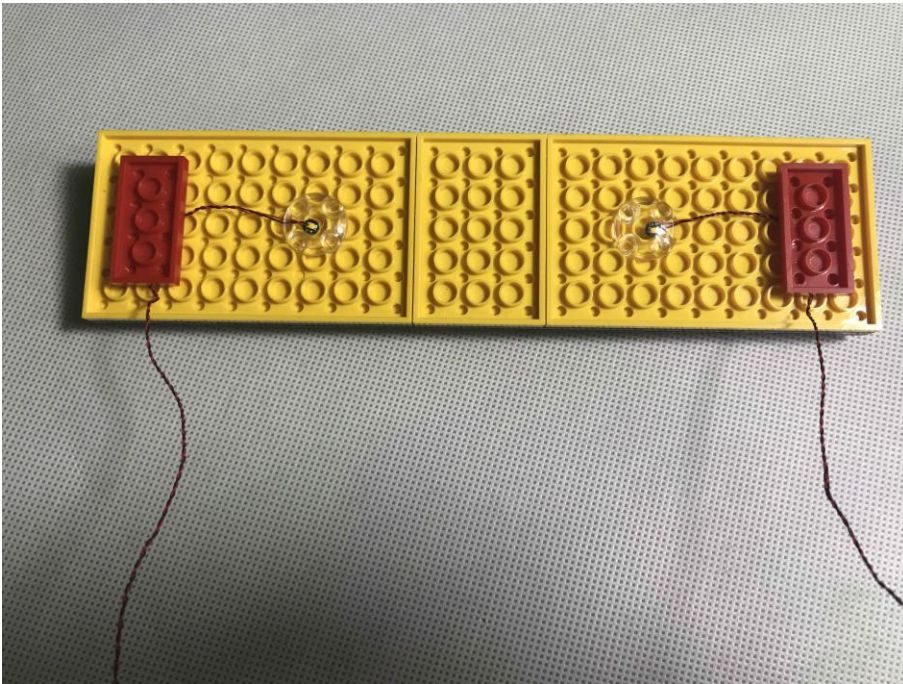


Place the cable underneath the plate, ensuring you leave the cable the way as shown in the picture

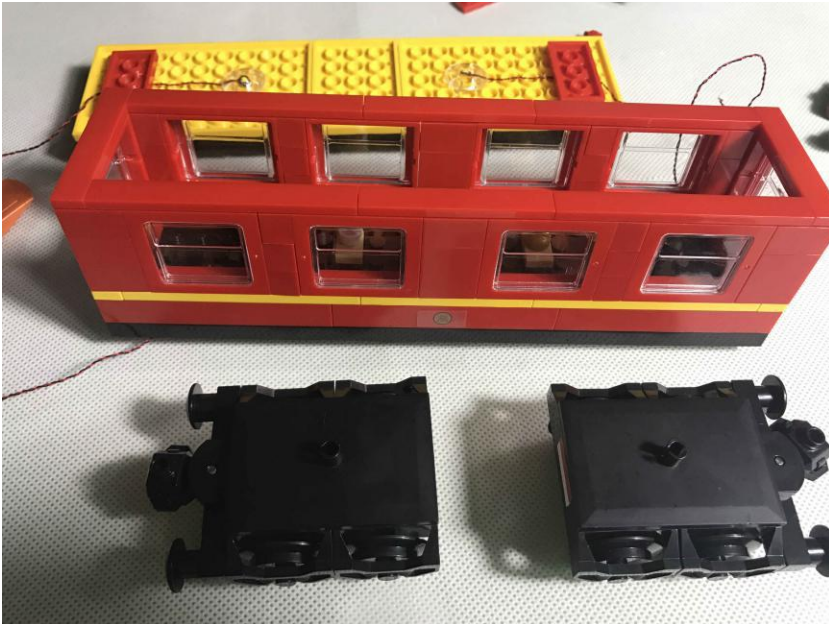




Repeat the above steps for the other Dot Light



Remove the 2 wheels



Thread the connectors of the 2 Dot Lights through the holes as per below, pull them out from the bottom of the car

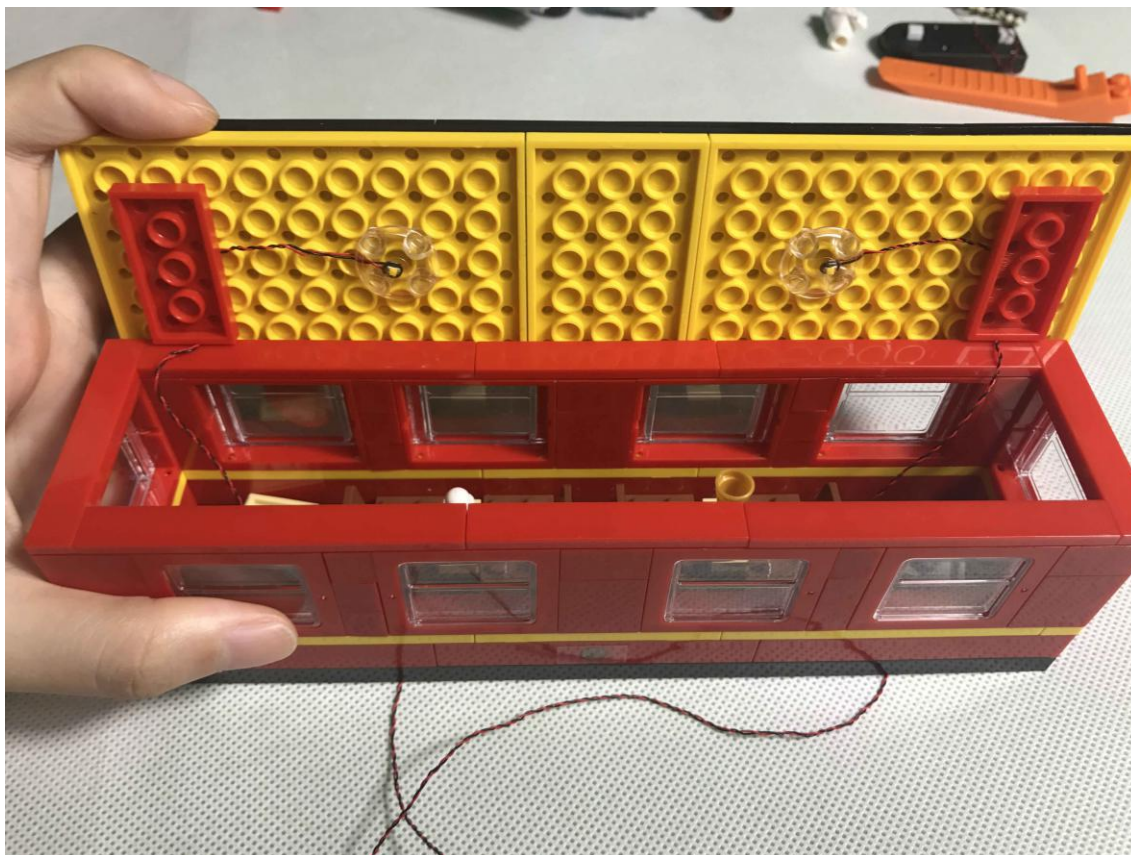


Remove the following 2 plates



Lift the roof up



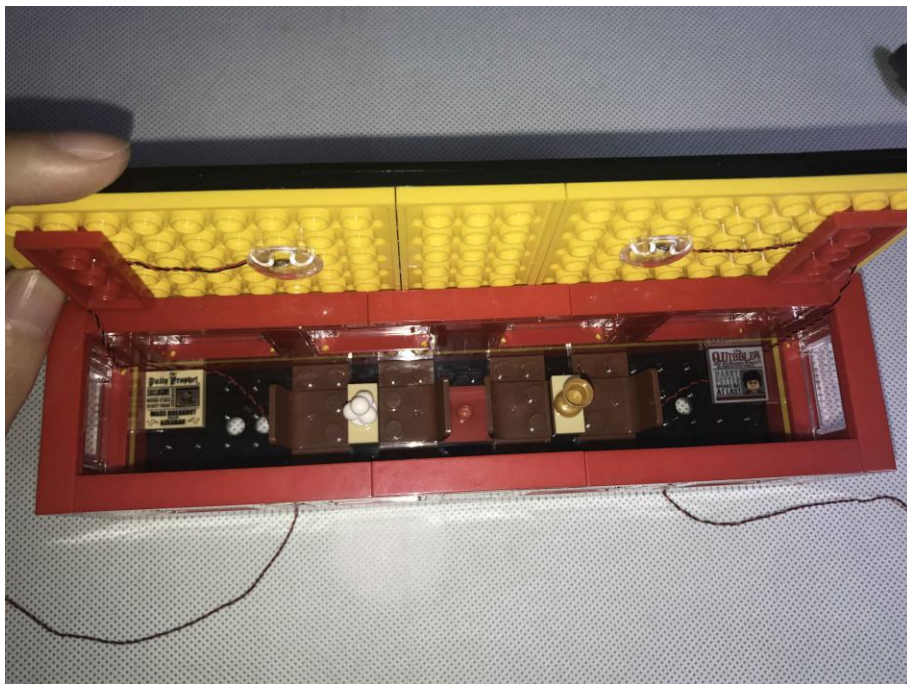


Place the cables along the wall at the base of the train

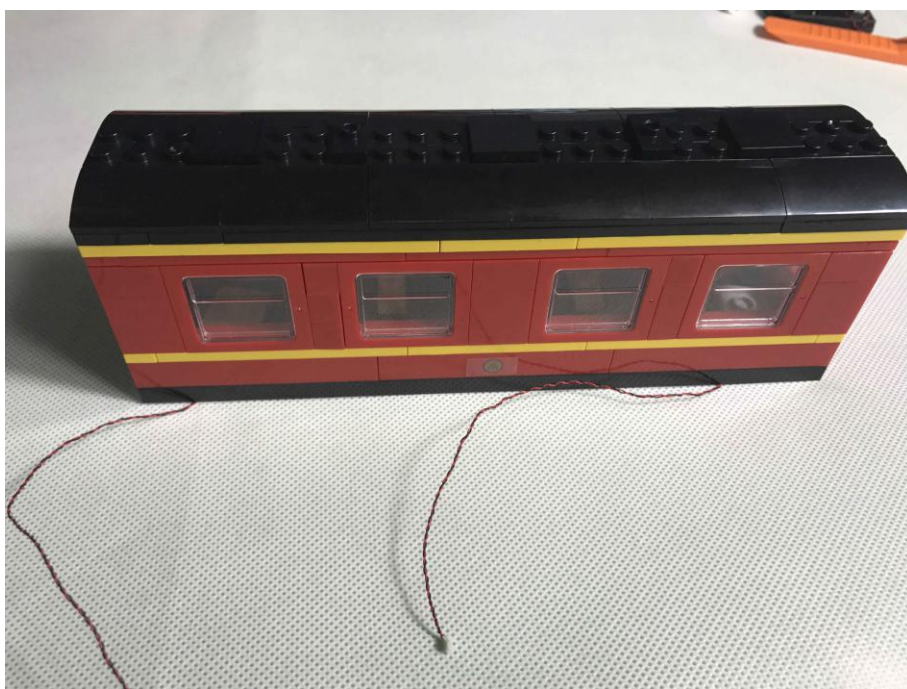


Repeat this step to place the other cable

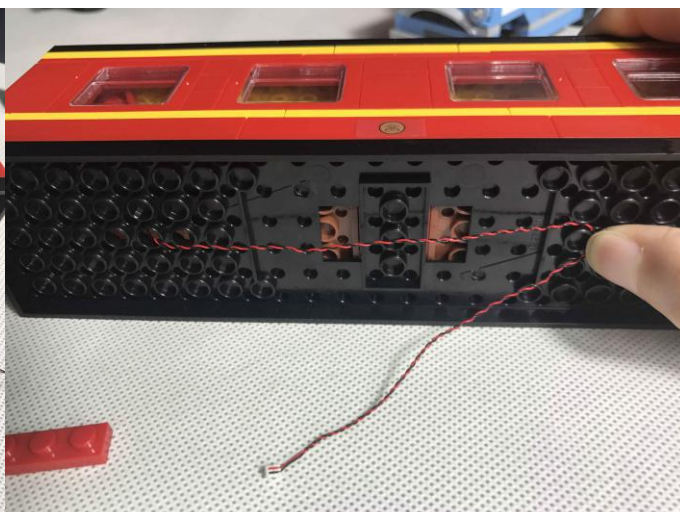
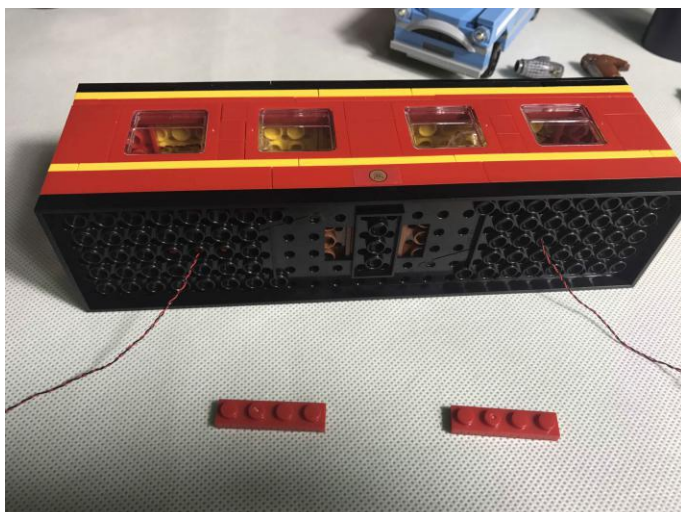




Reconnect the roof



Turn the train over, remove the 2 red plates underneath, press the cables under the 2 red plates







Take the Flat Battery Pack, inserted with batteries, a 6-port expansion board, then, stick adhesive tapes at their backs



Connect all the connectors to the expansion board, tuck the excess cables around the expansion board, stick the expansion board and the battery pack underneath the train



This finally completes installation of this Light Kit. Now turn on your light kit via your battery pack and ENJOY!

